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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

Memorandum

Date August 1982

From Health Services Officer
Division of Health Education

Subject Patient Education in Hospital Emergency Departments

To Colleagues in Health Promotion and Education

The attached paper, Patient Education in Hospital Emergency Departments, is one of a series of health-care-setting documents prepared under contract number 200-79-0916 between the Center for Health Promotion and Education of the Centers for Disease Control and the Center for Health Promotion of the American Hospital Association.

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Reports emanating from contract 200-79-0916 are listed below:

- American Hospital Association/Bureau of Health Education Health Education Project - Reimbursement Forum Proceedings, October 25, 1979

- Financing for Health Education Services in the United States - October 1980

- Annual Report: Health Education in Primary Care Facilities - August 9, 1979, to November 8, 1980

- Executive Summary - Financing for Health Education Services in the United States -- Providers, February 1981

- Executive Summary - Financing for Health Education Services in the United States -- Third Party Payers, February 1981

- Statements About the Health Education Roles and Responsibilities of Selected Health Care Providers, September 1981

- Consumer Involvement in the College Health Service, September 1981 (Also: Zapka JG, Dorfman SL. Consumer participation: case study of the college health services setting. Journal of the American College Health Association 1982; 30(4):197-203.)

- Blue Cross/Blue Shield Plan Support for Health Education Services: A Discussion of Issues, May 1982

- Foundation Funding for Health Education 1972-1980, May 1982

- Health Education in Health Departments, May 1982

- Patient Education in Hospital Sponsored Home Health Care Programs, May 1982

- Patient Education in Hospital Sponsored Ambulatory Surgery Programs, May 1982

- Health Education in Federal Health Care Facilities: U.S. Public Health Service; Veterans Administration; U.S. Navy and U.S. Air Force, August 1982

- Health Education in College Health Services, August 1982

- Culture-Bound and Sensory Barriers to Communication With Patients: Strategies and Resources for Health Education, August 1982

- Multi-Institutional Arrangements: A Review of the Literature, August 1982

- Patient Education in Hospital Emergency Departments, August 1982

Patient Education In Hospital Emergency Departments

AHA/CDC Health Education Project*
Center for Health Promotion
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Foreword

This resource paper is one of a series of health-care-setting documents prepared as part of contract #200-79-0916 between the Center for Health Promotion and Education, Centers for Disease Control (DHHS) and the American Hospital Association's Center for Health Promotion. A major objective of the first two years of this contract was to describe the current status of patient education in outpatient settings and health-care-setting-based comunity health education. The following specific types of settings have been studied: hospitals (urban, rural, multi-institutional); hospital-sponsored outpatient clinics; hospital-sponsored emergency departments; hospital-sponsored home health care programs; health departments; health maintenance organizations; college health services; group practices; community health centers; the U.S. Public Health Service; Veterans Administration facilities; and U.S. Navy and U.S. Air Force facilities.

In order to collect useful information about patient or community health education activities in these settings as well as to use limited resources carefully, project staff chose to begin with the literature review process. For some settings, in particular the hospital setting, patient and community health education were addressed separately because they seem to emanate from different parts of the institution. For most other settings, health education activities or a combination of patient and community education were studied. A frequently asked question has been "how did you define patient and community education?" For the most part, we did not choose definitions, preferring to look at how the different settings used the terms. Patient and community education were distinguished by their concentration on different major target populations: patient education was directed to people when they were <u>not</u> in the role of patients.

In order to organize the information in a comparable way across settings, the folowing variables were used to guide the development of the review: unique aspects of the setting; positive and negative factors influencing provision of health education; administrative support for health education; health education management structures; educational programming for specific target populations; evaluation activities; financing/budget strategies; staffing; consumer involvement; and relationships with community organizations. A particular emphasis was placed on understanding the management variables unique to each setting that would impact on the development of health education activities.

However, as we began to organize the reviews, it became clear that for some settings it would be difficult to use this set of variables. For example, in hospital-sponsored home care programs, patient education was so integrated into the delivery of care that it was difficult to match information found in the literature with such variables as health education management structures, financing/budget, and so on. For this reason, papers on settings like the home care setting focus more on the integration of health education into patient flow.

The specific process used to devlop each review will be described in a separate methodology section in each paper. In general, computer data base searches provided the initial basis for a literature review. Each draft document was then sent out for review by project liaison representatives and appropriate administrators and health education practitioners. Based on comments from these reviewers, additional literature was added, in many cases from reports, conference proceedings, or unpublished material that was difficult to find through data base searching. Also, through the review process, gaps in the literature were identified that were used in developing criteria for the selection of case study examples.

Several settings scheduled for literature reviews required a somewhat different approach. Project liaison representatives from the federal facilities--USPHS, VA, U.S. Navy, and U.S. Air Force--assisted in the development of papers with a national, central office focus. Reports and documents generated by staff of these facilities were summarized to provide an overview of the health education services provided. At the same time, because there have been such major changes during the past decade in community health centers, it was suggested that a literature review would not reflect current trends in health education activities. Therefore, project staff worked with the National Association of Community Health Centers to collect information on 25 community health centers serving urban, rural, or migrant populations.

Project staff used the first draft health care setting documents as a basis for selecting program examples, descriptions of which would complement the literature review. Two to twelve institutions representing each health care setting provided information about their specific patient and/or community education programs. This information was developed into case studies. The major objective of the case study preparation has been to present examples of how different settings are solving health education problems now. These program examples were not selected as models that should necessarily be copied by others. In fact, some institutions were chosen because they were in early, developmental stages of programming. Rather, each of the more than 60 examples provided raises issues and problems in programming that are likely to be faced by other health-care-setting staff interested in the development of effective health education activities.

Acknowledgements

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Special thanks are extended to the following reviewers for their helpful comments: Elizabeth Estrada, RN, formerly director of education and professional services, Emergency Department Nurses Association, Chicago, IL; Mary Faas, RN, coordinator, Emergency Psychiatric Services, Jordan Hospital, Plymouth, MA; Mindy Ferber, program manager, Division of Ambulatory Care, AHA; Geoffrey Gibson, director of research, AHA; B. Kenneth Gray, M.D., director, Department of Emergency and Ambulatory Medicine, William Beaumont Hospital, Royal Oak, MI and president-elect (1981) American College of Emergency Physicians; Elizabeth Lee, AHA/CDC project director, Center for Health Promotion, AHA; Billie Lent, RN, formerly head nurse, Emergency Services, Children's Hospital, Columbus, OH; Margaret McMahon, RN, lecturer and clinical coordinator, Family Nurse Practitioner Program, University of Washington Hospitals, Seattle, WA; Sheila Stanton, RN, Pompano Beach, FL; Judy Stoner, RN, Kalamazoo, MI; Jan Whitehead, RN, Longmont, CO.

Elizabeth Estrada, formerly director of education and professional services, Emergency Department Nurses Association, was particularly helpful in recommending reviewers and suggesting potential case study examples. B. Kenneth Gray, in his role as president-elect, American College of Emergency Physicians (ACEP), coordinated preliminary review of the document by ACEP committees.

Nannette Binns, RN, assistant director, Emergency Services, William Beaumont Hospital, Royal Oak, MI; Janis Bomar, RN, head nurse, Emergency Services, Children's Hospital, Columbus, OH; and Marsha Edwards, RN, clinical nurse specialist, Emergency Service, Yale-New Haven Hospital, New Haven, CT; deserve special mention here for their contributions to the three case studies included in the resource document.

Methodology

Literature review

The majority of journal articles and reports reviewed for this document were published between 1975 and 1981, although a few references from the early 1970's are included. Because of the liklihood that mention of patient education activities in the emergency department setting would be found in articles indexed by other subject headings, a variety of sources were used to identify potentially pertinent articles. These included computerized literature searches, published and unpublished bibliographies, and manual searches of journals, in this case the Journal of the American College of Emergency Physicians (now Annals of Emergency Medicine) and the Journal of Emergency Nursing. Several publications of the Emergency Department Nurses Association including their Core Curriculum and Tenth Aniversary Public Education Packets and several major emergency medicine text books and emergency nursing tests were also reviewed.

References were included in the review if they contributed to the description of hospital emergency departments or, specifically, of patient education activities in this setting. Articles were taken at face value: that is, no attempt was made to evaluate the quality of the programs described.

The paper was reviewed by AHA staff and selected others who are listed in the Acknowledgement section and was revised according to reviewers' comments.

Case studies

Three examples of hospital emergency departments in urban/suburban areas were chosen to provide more specific information about how patient education activities were planned and implemented in this setting. A good example of a rural hospital with an emergency service and patient education activities was not identified at the time the choice of case studies was made. Basic program questionnaires were completed by staff at each example institution. In addition, relevant reports, patient handouts, and other materials descriptive of the setting or of the patient education activities also were provided. Based on this information, project staff conducted a one-hour telephone interview with each emergency department contact person and prepared draft case studies. These were sent back to the institution for review and expansion as needed before final editing and incorporation into the resource document.

Part I

Literature Review

Introduction

The hospital emergency department (ED) of today reflects, perhaps more than any other setting, the health care problems of a community. Industrial and leisure trauma; social problems, such as rape, child abuse, and murder; problems in chronic disease management; lack of primary care options; and lack of prevention and self-care knowledge all find their way into ED statistics. Equipped to provide urgent care, most EDs in the past have put little emphasis on the educational component of patient care. While there is still little published evidence that coordinated, comprehensive programs are being developed, this review touches on a variety of ways that EDs have incorporated pieces of the educational process into their services. The potential for comprehensive programming is quite impressive.

The first two sections of the document briefly describe the ED setting and the ways in which this hospital department has changed in response to many of the major problems it faces. Each subsequent section presents either a justification for patient education in the ED or a description of a different set of pertinent activities, such as teaching activities in the waiting room or community outreach activities.

The setting

There are few secrets about life in emergency departments (EDs) today given the voluminous literature on the subject. Much of the literature shows that the ED setting is characterized by a wide range of conflicting demands on staff and a tremendous increase in workload because of increased utilization.

The increase in ED utilization over the past two decades has been well-documented. Increases are found both with respect to percent of all hospital visits and with respect to per capita visits for population (Can emergency . . ., 1975; Glass and Friedman, 1977; Prybil, 1977). Stalker (1978) cites the trend toward specialization and the decrease in the number of office-based primary physicians as two major causes of the increase. He also discusses how Medicare and Medicaid have contributed to increased use of EDs. Current statistics indicate, however, that at least for hospital emergency departments, the period of increasing numbers of visits may be over. The 1981 panel survey done by the American Hospital Association documented the first recorded decline (1.6%) in annual emergency visits to short-term US community hospitals--from 82,393,625 in 1980 to 81,106,576 visits in 1981. This compares to a greater than 10% increase in ED visits betwen 1975 and 1977 (Hospital emergency. . . 1982). The article suggests a variety of reasons for the decline including increased use of freestanding emergicenters, and more varied and accessible primary care options, especially group practices and HMOs. However, given high levels of current use in many ED's, the problems of overcrowding and conflicting utilization remain.

During the past ten years, numerous utilization studies have been done. In general they have shown that nonurgent use of the ED is widespread (Gibson, 1970; Geyman, 1980; Green and others, 1980; Wilson and others, 1980; Can emergency . . ., 1975; Schroeder, 1979; Young, 1979; McNamara, 1976). However, a more recent study conducted under the sponsorship of the American College of Emergency Physicians (ACEP) shows that patients who come to the ED need care more urgently than was previously supposed. The study examined prospectively and retrospectively the urgency of patients in EDs in 24 hospitals in a variety of geographical areas over a one-week period. It was found that physicians concurred that 70 percent of patients needed care within 12 hours of presenting to the ED (Gifford and others, 1980). This report contradicts all previous utilization studies, and brings up the question "what is an emergency?" Included in the reports is a good review of patient urgency literature. The authors point out that theirs is the only patient urgency study that examines both the prospective and retrospective assessments of physicians in the ED.

An article by Wolcott (1979) points out that there are many definitions of an emergency and that ED personnel differ widely in their views on the function of the ED. Young (1979) discusses some of these differences in philosophy and contrasts the "patient-oriented" view with the "disease-oriented" philosophy.

Pisarcik (1980) cites inability to reach physicians in their offices, inability to use primary care physicians because of their limited hours, personal attention and recognition received in the ED, competency of ED staff, increased mobility of patients, and facilities for comprehensive care as some of the reasons why patients use the emergency department for nonurgent care.

Differences in philosophy and differences in methods of conducting studies can account for differences in perceptions about whether or not patients are overutilizing EDs for nonurgent problems. However, the fact remains that there has been a tremendous increase in the number of patients that are seen in EDs (Can emergency . . ., 1975; Pisarcik, 1980; Stalker, 1979; Geyman, 1980). Kelman and Lane (1976) studied the question of the relation between the use of private physicians and the use of the hospital ED. They concluded that "The problem, we suggest, is not inappropriate use of the hospital EDs but rather limitations in the existing pattern of functioning of the private office practice base of medical care in this community." Another article on this subject showed that an increase in family physician availability within a community affected the number of ED visits. Visits decreased by 40 percent when family physicians became available in the area (Hilditch, 1980).

The ED acts as the "family physician" for many inner-city, minority, or indigent populations (McDonald, 1976; Pearson, 1976). All ED utilization studies that have been reviewed reported a pattern in which some patients had no primary care providers. Others did have their own physicians but were using the hospital for convenience, true emergency, because of third-party reimbursement incentives, or because their own physician's office was closed for the day (McDonald, 1976; Weigmann and Galvin, 1977). In one report of utilization patterns in a suburban/semi-urban area in New York, 20 percent of patients who had no regular primary care provider were above the low-income level. No more of those who had no provider were minorities than were those individuals who used the ED but who had a regular provider (Kelman and Lane,

1976; Prybil, 1977). Those who had no provider did tend to be new to the area and young.

More hospitals have responded to the increase in patient volume by developing specialized EDs and adding new kinds of staff to the ED. Specialized pediatric EDs are common and are discussed in three articles (Shah, 1976; Halperin and others, 1979; Hilker, 1978). Shah states that pediatric emergency services must be able to deal with conditions that are perceived to be emergencies whether or not they are considered real emergencies by physicians. Halperin discusses nonurgent utilization of the pediatric ED and suggests new approaches to pediatric care that are more patient oriented. Hilker found that many patients were referred to EDs by physicians and that many came even though they had pediatricians in the area. Other specialized types of EDs include alcohol, psychiatric, adult, and surgical EDs (Dilts and others, 1978; Ianzito and others, 1978).

New professional specialists also have emerged during the past decade in response to the need for better staffing patterns and better care in the ED. Emergency physicians, emergency nurse practitioners (ENPs), emergency nurse specialists, and physician's assistants (PAs) are all active specialists in today's EDs.

Schwartz (1978), in his Principles and Practice of Emergency Medicine, includes a chapter on the development of emergency medicine. He describes ED staffing patterns of the 1950s and early 1960s and compares them with staffing patterns that were developed in the late 1960s. Staffing the ED according to the Pontiac Plan (rotating of medical staff) and staffing with private corporations of emergency physicians are mentioned as some of the staffing patterns that have been used. The author also reviews the history of the development of the emergency physician speciality. The emergency physician as a leader, a planner, and an organizer in the hospital ED is discussed by O'Donovan (1977). Webb (1977) studied the effect of full-time emergency physicians on patient admissions to the hospital. The study shows that full-time emergency physicians can control the number of admissions to the hospital better than could personnel under the old staffing system. However, full-time physicians do not affect the trend toward increased ED visits. Organizational changes and their effect on treatment and cost considerations in the ED also are discussed.

Several articles describe the current problems and controversies surrounding the role of emergency physicians as well as the development of an emergency medicine specialty. Anzinger (1976) presents the dilemma of the ED physicians who on the one hand are responding to a need for more physician coverage in the emergency room, and on the other may face hostility from the medical staff who feel they are threats to the physician/patient relationship, and merely general practitioners who need not be listened to by specialists, and so forth. Johnson and others (1978) review the history of the ED specialty and especially the teaching role of the emergency physician. This report of a panel discussion on the ED physician in the university teaching hospital documents the loosely defined and often competitive relationships with other specialty MD roles, notably surgeons.

Emergency nurse practitioners (ENPs) are new specialists who are being seen more and more in urban EDs. Depending on the setting this specialist,

although functioning as an emergency nurse practitioner, may actually have been trained as a family nurse practitioner (McMahon, 1981). Roglieri and Goldsmith (1980) studied professional ED staff acceptance of nurse practitioners and found that, although physicians in general have accepted the emergency nurse practitioner (especially the teaching/counseling role of the new specialist), they have mixed opinions about the independent role of these nurses. Another physician and patient acceptance study, however, showed a high degree of satisfaction with the ENP among both physicians and patients (Alongi and others, 1979).

Rural EDs often do not reflect the emergence of these new specialties. They represent a situation in which staff physicians are on call and the ED may be staffed only by an emergency department nurse. In Virginia, however, a program was recently established to prepare ED nurses to be emergency nurse practitioners. Geolot and others (1977) describe the objectives of the program. The newly trained ENPs are able to take a more independent role in treating minor injuries in the ED and are able to perform advanced life support measures. This is crucial in rural EDs where a nurse may be the only staff member present. This new program allows her to take better care of critically ill patients until the physician arrives.

Physician's assistants (PAs) are new specialists who have become an integral part of urban health care. An article by Goldfrank and others (1980) describes their new roles and discusses a program in which the quality of care delivered by PAs in the ED was assessed. The authors found that the presence of PAs substantially improved the quality of care in the ED. Maxfield and others (1975) present one of the first reports on the use of PAs in the ED. Their focus is on the use of PAs in small, rural, community hospitals. The PAs were supervised by physicians either in person or over the telephone. Response of patients and physicians to the PAs was generally positive.

Other new roles have been created in the ED such as emergency clinical nurse specialist, triage nurse, discharge nurse, health aide, and patient representative. Social workers, psychologists, counselors, other triage personnel, and other nonmedical professionals, nonprofessionals, and volunteers are also part of the new ED setting. Staffing by nonmedical personnel and volunteers will be discussed in a later section.

Problems and solutions

Both the high volume of patients and the mix of patient types requiring care contribute to serious problems in EDs (Can emergency... 1975; Eggland, 1975; McDonald, 1976; McNamara, 1976; O'Donovan, 1977; Steele, 1976; Wolcott, 1979). The following problems were identified again and again in the articles reviewed: long waiting periods; inadequate attention; impersonality of care; high levels of conflict, confrontation, and hostility between staff and patients and among staff; delays in laboratory and x-ray services; not enough time to spend with individual patients; almost a "contest" between treating the true emergency and treating the nonurgent patient; some abusive and unresponsive patients; and highly bureaucraticized hospitals, resistant to change. In response to these problems, many hospital EDs have developed new ways of dealing with urgent and nonurgent patients. Continuing care,

follow-up, and satellite clinics and clinics for specific illnesses have been created to alleviate crowded EDs and allow personnel to adequately care for a reasonable number of patients.

Another new trend is the free-standing, for-profit emergency department. Many such EDs have been opened in Rhode Island. These centers are not hospital connected, but they do provide primary and emergency care to patients throughout the state. The centers do not have formal hospital backup arrangements, and hospital EDs have voiced concern over the lack of regulation of such facilities (New Trend, 1978). They also appear to be attracting away patients who previously used hospital emergency departments.

Several articles deal with the creation of an emergency follow-up clinic that could provide easily accessed care for suture removal, sprain followup and so forth. A patient compliance study done at The Medical College of Pennsylvania, Philadelphia, showed that such patients' compliance with ED follow-up care was very low. An alternative follow-up system was created that included the development of a continuing emergency care clinic located within the emergency department but not within the emergency unit itself. A second follow-up compliance study done after the first six weeks of the clinic's operation showed that patient compliance with follow-up care had increased significantly (Brodsky and others, 1978; Anwar and others, 1977).

Another alternative is described by Pearson and others (1976). A clinic was created in a rural section of Connecticut for use by nontraumatic, noninjury-related diseases. The clinic was meant to provide an additional source of medical care when private physicians were not available. The authors found that this kind of clinic is particularly beneficial in rural areas because distances to hospitals are great and private practitioners are few.

Medical World News reports that a round-the-clock special clinic for asthmatics has been set up at Queens Hospital in New York City. The clinic has cut hospital admissions for asthmatics significantly and offers special training for patients in home use of preventive drugs (Hospital clinic..., 1978). A drop-in center, opened in Toronto to handle the increasing number of people who seek nonurgent care, was reported in Health Care Drop-in, 1979). At the North Central Bronx Hospital, NY, the ambulatory care services and the ED worked together to help patients who had no source of primary care to find one. No new clinic was created, but triage nurses determined whether or not each patient who came to the ED had a source of primary care. If a patient had no such source of care, the nurse directed them immediately to a primary health team who would register them for long-term primary care (Goldfrank and others, 1978).

Many other factors in relation to the ED setting could be noted, but what seems most important from the point of view of patient education is that only 5 to 15 percent of patients who are seen in EDs can expect to be hospitalized (Can emergency..., 1975). The remainder either go home with instructions for self-care, leave with instructions to return for follow-up clinic visits, or are transferred to other facilities. Even when patients die on site, family members need assistance in identifying what steps must be taken (Jones, 1978). The existence of all of these kinds of situations in the ED indicates that it is an especially appropriate place for educational interventions. And there is evidence in the literature that ED staff, particularly nurses, perceive patient education as a major ED function.

Need for patient education

Several articles made reference to the need for patient education in the ED or in the role of specific staff members. An article on the ED as a comprehensive community service explores the role of EDs in providing nonurgent care. The article asserts that "emergency room personnel must be highly trained not only to give optimum service as medical experts during crisis conditions, but also as instructors in common-sense health practices." Particularly in hospitals in which many ED patients have no regular source of care, the "ER staff member . . . will often be required to teach elementary health practices to individual patients in the emergency room, especially when illness or accident might have been prevented by proper health care." In addition, "he must also be able to give special instructions when necessary on how to dress a wound, how to care for a cast, or how to properly use crutches or other medical devices" (The Hospital Emergency. . ., 1975).

That patient education is considered an important function of ED staff also can be seen in two other brief publications. The Committee on Trauma, American College of Surgeons (1977), published "Guidelines for the Physician Patient Relationship in the Emergency Department." The article notes that the conflicting demand to serve "life-threatening, urgent and nonurgent health problems can produce difficult relationships between patients and the ED staff." Eleven guidelines regarding professional care, nondiscrimination, information, informed consent, confidentiality, delays, research, professional fees, communication efforts, related services, and patient's dignity are set forth. Guidelines on information and informed consent are presented below:

> Information: "The physician should inform the patient of the diagnosis, nature of proposed treatment, the need for hospitalization or for follow-up care when not admitted, and prognosis."
>
> Informed consent: "The patient, if reasonably in possession of his faculties, should give informed consent to the proposed treatment. If the patient refuses treatment, the physician should inform him of the medical consequences of the refusal."

The Graduate/Undergraduate Committee of the American College of Emergency Physicians published an outline of emergency medicine core content categories (ACEP, 1979). This outline included consumer education and prevention (cardiopulmonary resuscitation and first aid), and, under the section on physician- patient skills, identified the handling of grief reactions, angry patients, ability to establish a trust relationship, and after-care instructions.

The Emergency Department Nurses Association (EDNA) published their Core Curriculum in 1975 and put out a new edition in 1980. The curriculum is considered by the association to be the definitive statement on emergency nursing practice. It provides a guide for program planners and nursing educators. Twenty-five modules cover the essential areas of emergency nursing practice, and each module follows the nursing process format. Patient and family teaching is dealt with in each module in the continuity of care section. A separate section on psychological nursing includes patient/family

teaching in relation to adult and child abuse, sexual assault, and crisis intervention (Holloway, 1980).

A recent pilot study in a major Chicago emergency department offers an interesting perspective on the need for preventive education in the emerency department. Examination of 100 patients with non-acute conditions using the ED during a two-week period revealed high life change scores using the Holmes and Rahe Social Readjustment (SRA) Rating Scale. Sixty percent of the total population had SRE scores equal to or above 300 and, according to scale developers, have an 80% chance of suffering from a major illness or injury within the next two years. The author suggests preventive education interventions could be implemented to decrease the chances of future morbidity (Parker, 1982).

Accreditation and legal aspects

Patient education is not only a perceived need in hospital EDs, it is also a necessary component for hospitals to consider in complying with accreditation standards. The Joint Commission on Accreditation of Hospitals (JCAH) standards for 1980 include several references to patient education in general and to patient education in the ED in particular.

The increasing importance of patient education in the standards formulated by JCAH is evident. One paper on accreditation and patient education points out that in sections that relate to patient education (quality assurance, utilization review, etc.), as well as patient education specific statements, the number of relevant sections has increased from 7 in 1976 to 13 in 1980 (American Hospital Association, 1980).

Sections from JCAH's Accreditation Manual for Hospitals (1980) that are relevant to patient education in the ED include those on emergency services, medical records, and nursing services. The emergency services section includes the statement that the "medical record shall include any instructions given to the patient and/or family for follow-up care." In the medical records section the following standards are defined:

> Appropriate informed consent should include evidence in the medical record that an indication that alternate means of therapy and the possibility of risks or complications have been explained to the patient. . . .
>
> When preprinted instructions are given to the patient or family, the record should so indicate and a sample of the instruction sheet in use at the time should be on file in the medical records department.

In the nursing service section, patient education is specifically mentioned. The standard emphasizes that patient instruction is to be given special consideration in the nursing plan. The standard also mentions that instructions given to a patient must be consistent with the instructions that are given by the responsible practitioner. Patients who are discharged from the hospital and who require nursing care must receive instructions and individualized care before they are discharged. The instructions should be noted in the medical record and should be consistent with the instructions of the physician in charge.

Besides accreditation considerations, hospital ED staff need to consider legal problems that arise in the area of patient education. Stoner (1980) defines three of the major legal areas of concern for ED personnel who are involved in patient education: informed consent, telephone advice, and advice given without documentation.

Informed consent is not always easy to get from patients who are brought to the ED. One article explains implied consent and discusses some of the situations in which consent cannot be obtained (Mancini, 1978). The author says that many patients who come to the ED are inebriated, unconscious, incompetent, unable to understand English, or are too severely ill to sign a consent form. In cases like these, Mancini explains, "consent is implied by presence and need for treatment." Another article defines informed consent as stemming from "an understanding based on adequate information about a condition and its therapy, the available alternatives, and the collateral risks. Also covered in the article is the basis of informed consent in the doctrine of battery. The definition of battery here excludes emergency situations (American Hospital Association, 1980). Baum (1979) explains in her article on liability and hospital ED treatment that EDs should have good definitions of what constitutes a true emergency. The author lists 12 situations that could be defined as true emergencies in relation to the issue of consent.

Legal problems with telephone calls in the ED is another area that ED personnel need to consider. George (1976) cautions ED nurses that they must be very careful about giving advice over the telephone. The author cites the case of Love vs. Ramsay in which a physician gave advice over the telephone. He diagnosed the flu and prescribed drugs. Soon after, the patient died, and the family sued and won. Another case, Rehill vs. Goodman, is cited in an article by Levy and others (1979). Lack of documentation of telephone conversations figured centrally in this malpractice case.

McMahon explains that there are two sides to this issue. The legal minds say that no advice should be given over the telephone and that all patients should be told to come to the ED if they are concerned about their condition. On the other hand, there are those who believe that the ED should be used only for appropriate problems, that the cost to the patient (or insurance subscriber) for a nonemergency visit to the ED is substantial, and that the role of the ED includes consumer education and health promotion (McMahon. Letter..., 1980).

On the side of those who do recommend giving telephone advice, there are many articles. Levy and others (1979) describe pediatric telephone protocols that have been developed to provide over-the-phone advice to parents about their children's conditions. The safety of the protocols are discussed in relation to the medical outcomes, but the legal issues are not discussed. This is true of several other articles on telephone protocols (Shah and others, 1980; Strasser and others, 1979; Kramer and others, 1979). Sobel (1980) describes several prerecorded audio tape message systems such as TEL-MED, as well as examples of ED and hospital settings which have developed guidelines for providing information over the telephone to patients about self care at home. Two additional and potentially useful publications--(Rosekrans, 1979 and Brown, 1980)--are listed in this article but not reviewed here.

The EDNA Core Curriculum mentioned earlier includes a chapter on legal considerations in ED nursing in which there is a section on consent, documentation, and reporting responsibilities.

Changing staffing patterns

A number of articles in the ED literature report the development of new staff roles that have a patient education component (Glass and Friedman, 1977; Jonas, 1976; McDonald, 1976). These new roles apparently have been developed in response to the need to personalize care, explain delays, and help the patient through the complexities of receiving care in the ED setting.

West and others (1977) describe the role of patient coordinators who were introduced in one hospital ED to improve coordination among clerical, medical, and nursing personnel. One role of the coordinators was to "keep families and friends in the reception area aware of the patient's status . . . and to explain technical aspects of care." Various complaints from patients prompted another hospital to hire an emergency department ombudsman who could make patients feel welcome, explain the reasons for long waiting times, and provide information to families about the patients. The ombudsman also helps to resolve conflicts between patients and staff; provides health education on smoking, venereal disease, and other problems; and helps arrange follow-up care (Lane and Evans, 1978).

A research study done at the Johns Hopkins Hospital, Baltimore, found that using medical health associate students in an ED patient advocacy program did not produce the results expected. The goal was to improve provider communication, raise patient's knowledge levels, improve patient and family satisfaction, and improve patient compliance with the medical regimen and follow-up care. No description of the type of patient education provided is given. However, when evaluating the program, the researchers thought that the results were poor because the advocates competed with traditional roles, were identified with providers rather than with patients, and may have placed the needs of the institution before the patients' needs (White and Gibson, 1978). Other hospitals have used patient representatives and ombudsmen more successfully (Patient reps . . ., 1980; Baranowski, 1976).

Social workers and social service teams also are being used to provide care for the "whole patient" in the ED. One article describes the multidisciplinary psychiatric service in Cincinnati General Hospital's ED. The team has an office in the waiting room, and social workers and counselors act as ombudsmen, trying to help patients when the system doesn't work for them (Can emergency . . ., 1975). The social work department and the ED at another hospital worked together to initiate extended coverage of the ED by social workers. A list of objectives for the social work component is given in the article including assisting the medical staff in assessing levels of psychological and social functioning, acting as liaison for patients while in the ED, providing crisis counseling, and assisting with follow-up arrangements (Farber, 1978). A third article discusses the role of a social worker in addressing specific cultural differences of a minority population in the ED-in this case the urban American Indian. The author also includes a list of specific suggestions to assist ED staff communicate with this population effectively (Yuki, 1981).

A study of ED physician and nurse attitudes toward referring patients to social services was done at one hospital (Gwinn and others, 1979). ED staff, it was found, would refer a large number of patients to social service workers if they were available in the ED. The result of the survey was that a staff of social work graduate students were hired to cover the ED in peak times. After the social work program was established, other needs were identified, including the need for a detoxification unit focused on substance abuse.

Social issues and increased education

There are some areas in which changes in the patterns or content of ED care have been influenced by social issues. In reviewing the literature on emergency care since 1970, one finds numerous articles on rape treatment, child abuse, crisis intervention, wife-beating, elderly abuse, and other social problems (Cael, 1978; Getz, 1977; Johnston, 1977; Parents . . ., 1977; Parker, 1977; Quitkin, 1980; Sherber, 1977).

The best example of the effect of social issues and changing values (for example, the effect of women's rights activities) can be seen in the literature on rape victim treatment in the ED. Approximately 25 to 30 separate articles on rape victim treatment appeared in the hospital literature between the years 1973 and 1976. The most prolific writers on the subject are Ann Burgess and Linda Holmstrom who collaborated on numerous articles and a book on the subject (Burgess and Holmstrom, 1973-1975). Abarbanel (1976) is another author who has written numerous articles and developed a manual on hospital-based rape treatment. A film, included with the manual, shows a rape taking place and follows the patient through the entire emergency medical care process (Abarbanel, 1980). The National Center for the Prevention and Control of Rape (NCPCR), established in 1975 by congressional mandate, has two publications on rape treatment: "Medical and Psychological Aspects of Sexual Assault" and "Resource Materials on Sexual Assault" (NCPCR, 1977).

Rape treatment programs have a large patient education component. Patients must be informed about the possibilities of pregnancy and venereal disease, and must comply with follow-up treatment that is recommended if positive outcomes are to be achieved. Allgaier (1979) treats this aspect of rape treatment programs and points out that rape prevention is an important part of most hospital-based programs. The author reviews rape treatment programs across the country and emphasizes the importance of counseling services that are provided to victims.

Specific rape treatment programs are described in numerous articles. Only a few have been chosen for review here. Daniels (1979) presents the protocol for treatment of rape victims that has been used at the University of Cincinnati Medical Center since 1976. One component of the three-part protocol is "to provide medical advice concerning pregnancy and venereal disease as well as emotional support." Before a rape examination is given in this hospital, a social worker assesses the patient's need for psychological counseling, trys to allay the patient's anxieties, and helps the patient to contact relatives. Follow-up care is strongly recommended and patients are encouraged to return to the hospital ED six weeks after the rape occurs.

Before and after surveys conducted in a number of hospitals between 1973 and 1975 showed that many hospitals introduced standardized care protocols, mental health and patient advocate services, and improvements in the quality and sensitivity of care for rape victims during those years (Cohen and others, 1976). Bassuk and others (1975) report on a rape crisis intervention program developed by a group of concerned professional women in a metropolitan teaching hospital. The article stresses the role of the rape counselor in giving information about medical procedures and administrative protocols. Another article describes the Denver General Hospital ED volunteer companion program and notes that one role of the volunteer is to provide information and emotional support to the patient and family members (Evans and Sperekas, 1976). Clark (1976) notes that many ED staffs have negative attitudes about rape patients. She explains how female nurses and social workers in one hospital ED have been trained to provide counseling, emotional support, information on resources available for medical and legal problems, and written information about medications received.

None of the articles on rape victim treatment goes into detail about teaching content, but all provide a good overview of how the anxiety, emotion, and trauma associated with rape can challenge the ED staff to provide information, support, and a more humane and sensitive mode of care. They also show the extent to which social issues can influence patient education and the role that activists and volunteers can play in altering the health care system.

Follow-up care after emergency visits

The rapid growth in the use of emergency facilities for nonurgent, outpatient care has both overburdened EDs and reinforced patterns of fragmented, episodic care. As a result, many institutions have experimented with a variety of mechanisms to improve follow-up care. One clear factor that has influenced the development of patient education in ED settings is the need to improve on poor rates of compliance with follow-up care appointments.

Although some of the improvements are structural (changes in appointment mechanisms, creation of new clinics), others reflect the development of new staff roles, such as follow-up clerks and discharge nurses. One theme that runs throughout this literature is the need to communicate to patients the importance of appropriate follow-up care and ways to use the health care system more effectively. Although not all of the articles reviewed here stress patient education as such, all are directed at improving patient utilization of the health care system.

Research studies, such as the one done by Gibson (1978) on the characteristics of patients who walk out of the ED, provide insights into the hospital ED as a system, but also result in exhortations about the importance of explaining to patients the reasons for lengthy delays. Gibson and the other authors concluded the following as a result of their study:

> Since patients who are likely to leave the emergency department prematurely probably cannot be accurately identified on initial presentation, the best strategy may be an initial explanation to each patient, repeated at 30-minute intervals, of the reason for waiting, the likely length of waiting, and the principles of triage.

A research study conducted by Brodsky (1978) demonstrates that one motivation for patient education comes from the need to address problems of inadequate follow-up return rates. Although the article reports on the development of a continuing emergency care clinic, there are references to the need to teach patients self-care for suture removal since 36 percent of the patients who are asked to return for follow-up suture removal never reappear.

Fletcher and others (1974) reported that patients who rely on the hospital for nonurgent care do not return for follow-up care and that the failure to return is due to confusion or inadequate communication. In response, a follow-up clerk position was created in the ED. The result was a shift from a 40 percent nonreturn rate to a 20 percent nonreturn rate among patients who were scheduled for follow-up care. A combination of reminder letters, telephone calls, personal contacts, and patient advocacy was used by the clerk to facilitate follow-up.

One of the most interesting articles on the patient education aspect of ED care is that by Chapman (1976). This article reports on the development of a discharge nurse role that was meant to remedy the folowing situation: "A patient can receive treatment and be discharged without ever knowing what ails him and, worse, without understanding the medical regimen he must follow if the treatment is to be effective." Chapman states that the discharge planning nurse receives special training in interviewing "to solicit and use patient feedback to help determine that instructions are understood and can be followed." The article provides useful details on the discharge interview and the patient education plan. These are summarized below:

Discharge Interview	Patient Education Plan
"The discharge interview should lead to the following results:	"The plan for patient education...
(1) The patient can tell in his own words what the nurse has explained to him about the nature of his illness;	(1) is explained verbally, bilingually if necessary
(2) The patient, having been informed of the medical regimen prescribed for him, states how he can carry it out...;	(2) includes written instructions for the patient
(3) The patient will have explained any secondary problems he has and his plans will include suggestions for dealing with these;	(3) may include printed instructions that are available for certain problems (cast care, things to watch for following head injury)
(4) If the patient does not have a private physician or is not a part of an ongoing health care system, the nurse can explain the importance of these. . . .;"	(4) is set up to include family in teaching (5) and includes information re: follow-up care."

Another method of overcoming poor compliance with follow-up appointments is described in an article by Anwar and others (1977). Structural changes in

appointment-making were introduced and an emergency care clinic was created. One project described in the article involved the use of indigenous health workers who made home visits and provided information and reminders to patients about follow-up care. The program did not improve compliance with follow-up visits.

A study of a short-term, follow-up clinic that was created at the University of Cincinnati Medical Center showed that follow-up compliance increases when appointments are made within the first three days of the emergency department visit. The clinic developed a rapid-return system for follow-up care and scheduled patients to see the same person who had initiated treatment. The overall compliance rate was 63 percent (McMullen and others, 1979).

At one hospital, the quality assurance committee focused on the ED in three areas: adequacy of documentation of care, adequacy of patient instruction. and patient adherence to specified regimens. A telephone follow-up audit was used to gather information on patient compliance with instructions given in the ED. Patients with head trauma and lacerations were chosen for the audit, and the survey indicated that patient outcomes were generally satisfactory. An interesting finding during the audit was that 12 patients had not returned to the ED for suture removal. Several patients explained in the telephone inverviews that they had removed the sutures themselves because they assumed that they would be charged additionally for a return visit. To assure that future patients would return to the ED for suture removal, ED personnel were instructed to emphasize to patients that no additional charges would be made for follow-up visits to remove sutures. ED personnel prepared a written reminder of this fact and distributed it to all patients who were treated for lacerations in the ED (Mitchell and others, 1978). This article also includes an example of the instruction sheet that is distributed to patients who have sutured lacerations.

A family service health team working in a county hospital instituted a program that offers rape victims and their families crisis counseling in the emergency department and follow-up care in a family practice clinic. Follow-up compliance increased from 8 percent before the service was offered to 86 percent after the program was instituted (Kaufman and others, 1976). Family members of more than half of the victims also were seen and a wide range of health needs that had not been identified in the ED were identified on the follow-up visits.

A pediatric walk-in clinic studied follow-up compliance rates of children and found them to follow the same patterns that are found among adults. Only 35 percent of the children who were advised to make follow-up visits to the local health center actually did so. A larger percentage of patients for whom follow-up care was optional than for whom follow-up care was recommended made a return visit (Weitzman and others, 1980).

Medical World News reports that a round-the-clock clinic for asthmatics was opened in New York City so that asthmatics always would have a place to go to relieve the anxiety that often triggers attacks. The clinic has cut admissions to the hospital for asthmatics in half, and patients are getting special training to do their own follow-up care (Hospital clinic. . ., 1978).

Teaching in the ED waiting room

Several articles that were reviewed report the existence of patient education programs in the waiting room. Lane and Mazzola (1976) report on the innovations developed at Brookhaven Memorial Hospital, Patchogue, NY. The hospital is a 350-bed, acute care, general hospital located in a suburban/ semi-rural community on Long Island. The ED serves 38,000 patients annually. The article describes a patient follow-up system that was developed "to encourage, educate, and provide assistance in obtaining a regular source of care and preventive services" for young people and new area residents. In addition, a videotape was developed in which ED staff explain procedures for triage. The videotape was introduced to explain long waiting times and delays in the ED and to inform patients about how to use hospital services and facilities more effectively. There is also a brief paragraph in the article that describes a "multi-faceted program of patient education," using closed circuit television in patient rooms and waiting areas, cable television for public health information, and a variety of other community health education activities. Support for the closed circuit television was provided by the United Way of Nassau-Suffolk and the Nassau-Suffolk Regional Medical Program.

Methodist Hospital, Gary, IN, also has a video program as a "365-bed, inner-city hospital" that serves over 30,000 patients annually in the ED. An article describes the patient education program, which was one of several changes introduced to help reduce "confrontations in the waiting area between families and the security staff, admitters, or ED personnel," and to provide a diversion during lengthy waits to receive care (Staff shows. . ., 1979). High family anxiety, poor communication with patients, and a small, crowded facility contributed to problems. The newly appointed triage nurse assumed responsibility for showing the videocassette/television films on the following topics:

Topics covered	Topics to be added
hypertension	weight control
sickle cell disease	nutrition
early warnings of heart attack	immunizations
post-coronary problems	fever control
diabetes	how to read a thermometer
cast care	what to do for minor burns, wounds, and diarrhea
stroke awareness	film on how to use ambulance service
arthritis and low back pain	
pregnancy and birth control	
breast self-examination	

The article reports high patient and staff satisfaction with the video program, but points out that financial support for the program had to be pieced together from hospital funds and donations.

Nishiura and Runk (1980) report on a program at Children's Hospital of Michigan in which videotapes are used in the ED to teach general health material to parents of young children. Informal discussions between parents and the coordinator of health education at the hospital are held after the tapes are shown. A study was made of the appropriateness of the tapes in the

ED after several questions as to their usefulness were voiced. ED staff members feared that the films could raise more questions than regular personnel had time to answer. This could have an adverse effect upon parents' views of their hospital experience if ED personnel appeared uncooperative in answering questions. Some felt that the parents did not look at the films and that they only served to disturb parents who could otherwise be giving attention to their sick children.

The study set out to determine if films in the waiting room of the emergency department were acceptable to parents, if seeing the film affected parents' attitudes about their hospital experience, and if the discussion periods following the films affected parents' attitudes. Study results showed that parents generally felt that the films were appropriate in the ED waiting area. Ninety percent of the respondents thought that showing the films was a good idea. Thirty percent, however, responded that the films were hard to watch in the waiting area. Parents generally agreed that they learned something from the films, and only a small percentage found them hard to understand. Most parents thought that the films made the time go faster while they were waiting and that the discussion groups were helpful.

At a hospital in Washington, DC, videotapes covering general health subjects such as hypertension, prenatal care, immunizations, and fire prevention are shown in the ED. Studies have not been done on the effectiveness of the films, but the director of the ED thinks that the films are too basic for the population that the hospital serves, and that they need to be revised with a more sophisticated audience in mind (Pearce, 1981).

An innovative drop-in child care center has been set up in one hospital to serve children who are waiting in the ED. The outdoor center at Los Angeles County-University of Southern California Medical Center uses volunteers and paid staff, and children are able to play on jungle gyms, ride tricycles, and build sandcastles. The staff at the center try to involve the parents and encourage them to stay and play with their children. Staff members have an opportunity to observe symptoms of learning difficulties, child abuse, or other problems that the parents might not recognize themselves (Freeman, 1979).

Patient education integral to ED care

Many articles provide evidence that there is a growing emphasis on patient education in the emergency care literature. Several of the articles were published in the Journal of Emergency Nursing and are evidence of the fact that nurses perceive patient instruction to be a major part of their roles in the ED. Others were published in emergency care specialty journals and suggest that physicians, too, are concerned about patient education. While none of these articles, except the didactic one by Miller, speak to organizing formally for patient instruction programs and protocols across a variety of patient problems, many of them do place substantial emphasis on what the patient needs to know about his or her illness and the treatment that is suggested.

Several nursing texts were reviewed for patient education content. McMahon has a chapter on emergency care in Luckmann and Sorensen's text

Medical-Surgical Nursing: A Psychophysiologic Approach (1980) which emphasizes the importance of patient teaching in the ED. The author says that ". . .a major role of the nurse is client teaching. Disease detection and health promotion must be embraced as vital roles of the nurse in emergency care. Finally, since a patient's first impressions of the health care system are often molded by experiences in an emergency department, nurses must be skilled at public relations, stress management, and creative problem solving."

Barber and Budassi (1979) also include patient teaching in the various chapters of their text, Mosby's Manual of Emergency Care. Teaching and follow-up advice is included in sections dealing with frostbite, heat exhaustion, diving emergencies, rape, and pediatric emergencies. Lanros (1978) in her text, Assessment and Intervention in Emergency Nursing, includes specific patient education sections in her chapters on orthopedic emergencies, trauma, wound management, pediatric emergencies, drug abuse and toxicology, and psychiatric and emotional crises.

Miller (1978), professor of continuing education, Creighton University College of Nursing, Omaha, NE, reviews the teaching-learning process in her article on teaching in the ED. The author does not describe a specific program in a hospital ED, but rather provides a program planning model for use by ED staff. Miller's thesis is that patients who return home after leaving the ED must be prepared to carry out self-care measures. She notes that the emergency setting impedes effective teaching and that many nurses feel that they cannot teach well. She also points out that the Joint Commission on Accreditation of Hospitals' standards require patient education and are an impetus for improving this aspect of care. The increasing concern about hospital liability for giving information over the telephone is also discussed. Miller gives the evidence that effective education can decrease readmissions, decrease suture line infections, and reduce the number of call-back telephone calls, thus demonstrating the value of increasing the patient education skills of staff.

The article is fairly comprehensive with respect to educational diagnosis (assessment). Specifically, factors that might influence a patient's capacity to learn are identified as follows:

- extent of trauma
- state of awareness
- age
- communication capability
- anxiety level (as reflected in pulse, muscle tenseness, excessive speech, gross muscular movement, and amount of eye contact)
- motivation to undertake self-care (as measured by nonverbal communication, question-asking or patient's initiating conversation about home care)

The need to adapt teaching/learning goals to specific patients is stressed, and several examples are provided that might stimulate staffs to think about how such teaching can be done. Demonstration, skill practice, and question/answer with analysis of critical incidents are suggested both as teaching and evaluation strategies.

Finally, Miller offers a series of points that should be considered when planning patient education programs or staff straining sessions for the ED. These are outlined below.

Patient teaching in the ED	. Explain what you are going to do . Inform the patient regarding any transfer to another facility . Tell patient what to do at home
Goal of program planning	. Identify prime areas where teaching is required . Develop effective instructional home care guides for patients . Review process of patient teaching with staff (They won't enter patient teaching in the record if they don't recognize what they're doing as teaching)
Identification of needs	. Use list of patient problems or diagnosis from previous years . Prioritize . Describe how to develop teaching guides
Develop a form to facilitate	. Form should include patient problem/diagnosis; potential problems; prevention/restorative measures; patient teaching (points to stress); content of instructional guide (for patient's home care instruction sheet); and teaching methods to be used
Planning home care guides .	. Things to consider: language; brevity; symptoms that indicate need to call back; importance of critique by staff and patients after trial use

This article is a useful one for ED staffs that are trying systematically to improve their patient ecuation program. The concepts are not new to people who are familiar with the patient education literature, but the application of these concepts to ED settings is unique.

Several articles that were written about specific medical problems often encountered in the ED have significant patient education content. Among the

numerous articles covering medical or surgical interventions, the ones reviewed here stand out as indicators of increased sensitivity to patient education and self-care measures.

Zimmer (1979), in a review of appropriate care for animal and human bites, pointed out that patients need instruction regarding the following: return for care at the first sign of infection; change of dressing after 24 hours or when wet; and elevation of wound if possible. Bone and Hiller (1978) reviewed treatment of bronchial asthma and the new drugs that have been effective in asthma management. With respect to patient education in the emergency room, the authors say only that "Patients who respond well may be discharged home with medications. . . .They should be instructed to seek emergency help should their symptoms return, since relapse is not unusual within 12-24 hours after an emergency visit." The authors place great emphasis on teaching in outpatient (non-ED) settings. This may be because they think that the patient's receptivity will be greater when the patient is not being seen in the context of an emergency attack. They think that patients need to understand the disease process, the goals of therapy, symptom relief measures, the need to vary medications over time to achieve the desired results, and the importance of recognizing early signs of a pending attack in order to seek care quickly.

Maiman and others (1979) also report on patient education for asthmatics in the ED. They discuss a research project in which the ED setting is used to explore ways to increase patient self-treatment and "reduce the use of emergency services for asthma attacks." The project described involved initiation of interventions that were relevant to patient learning, such as class similarity between provider and patient, and positive written appeals as well as reinforcing follow-up telephone calls to influence patient behavior. The author suggests that written handouts may not facilitate communication with patients if the handouts are a substitute for oral communication.

Frick (1978) also emphasizes patient education in an article on toxemia written for ED nurses. She stresses the importance of prenatal teaching to help prevent toxemia, particularly with respect to nutrition, and recognition of signs of toxemia (swelling, dizziness, or headaches). In addition, however, when outlining a 15-point care plan, she emphasizes the importance of explaining both the disease process and the treatment in order to decrease the patient's stress. Finally, staff are urged to "teach the patient how to breathe to relax contractions and lessen pain."

Gephardt (1978), in a review of ED care for patients with anaphylaxis from insect stings, states that a patient needs to know about "follow-up care, desensitization programs, and protective measures to prevent a future reaction." The author goes on to explain more fully the exact information that should be given about serum sickness, desensitization, and self-protection.

Sandvik (1977) wrote an article on the emergency management of hyperventilation that included substantial information about patient education. Because anxiety-induced hyperventilation is frightening for patients, family, and staff, Sandvik set out to provide practical tips on patient care in the ED. The author argues that because frightened patients may imagine that they are having heart attacks, the staff need to be

especially calm and firm and careful in assessment. Sandvik says, "you must deal with not only the physical aspects of the patient's problem but also help him to understand the mechanisms of the syndrome and allow him the opportunity to discover or evaluate the anxiety. . . ." The actual monologue developed for use in the ED at Alameda (CA) Hospital is reproduced in the article. In addition, Sandvik stresses the need to explain hyperventilation and the recognition and treatment of symptoms at home.

Like Sandvik, Krogseng (1979) published an article with a major emphasis on what to tell patients about coronary risk factors. Krogseng's article is especially interesting because it discusses the need for EDs to assume a preventive role with respect to heart attacks. She argues that "few persons are motivated to seek care when they consider themselves healthy." Educating about risk factors when they do present, then, is an important role for ED staff. After a review of coronary heart disease, its associated risk factors, and health maintenance interventions, the author presents an illustrative case study of a patient encounter. She reviews both the information that should be given and effective methods of teaching. The Krogseng article and the Sandvik article both present good models of how to organize content so that medical and patient education measures are clear. In addition, both are sufficiently detailed that they could be used as "stimulus articles" against which an ED staff group might assess its own practices, patient education content, and process. Miles (1980) discusses the importance of patient education in relation to sexually transmissible diseases. In a section entitled "Patient education and follow-up" she emphasizes that the patient must understand the nature of the infection and its medical management in order for treatment to be successful. She says that patients should be reminded that they must complete the treatment and should not give it up after the symptoms disappear. Other instructions specific to the treatment of these diseases that should be given to patients include instructions to refrain from sexual intercourse, to force liquids and restrict alcohol consumption, and to comply with follow-up instructions. Follow-up blood tests for some sexually transmissible diseases are extremely important for successful treatment, and the author stresses the need for patients to be informed of the consequences of noncompliance.

Patient education in the ED with regard to migraine headaches is discussed by Canan (1980). The article deals mainly with the medical aspects of migraines but includes a section on patient/family teaching. The author says that "one of the primary responsibilities of the emergency department nurse is patient and family teaching." She emphasizes that the family of a migraine patient should be told that the headache was definitely a migraine. A review of what constitutes a migraine should be given. If the migraine patient is taking birth control pills, she should be told that this may be causing her problem. Drug side effects should be reviewed, and consequences of abusing the drugs prescribed should be discussed.

Erler (1980) includes a section on patient teaching in her article on iron poisoning. She stresses the importance of teaching parents of young children who have been poisoned how to childproof their homes. Treatment for iron poisoning should be reviewed with the victim or with parents, and parents should be instructed to post the local poison control number near their telephones.

A study on the care of survivors in cases of sudden death was done at Crittenton Hospital, Rochester, MI. The study attempted to identify the emotional support needs of survivors and evaluate the procedures used to care for these needs in the ED. The results of the study were a series of observations and recommendations that are included in the article on how ED personnel can treat survivors in a sensitive and humane manner (Jones, 1978).

A series of one-page patient instruction sheets were published in successive issues of Emergency Medicine in 1979 (McMicken, 1979). Developed by Daniel B. McMicken, Valley Medical Center, Fresno, CA, they are "designed for use in the hospital emergency department. The sheets should also help physicians in private practice provide information and instructions for after-care when their patients have been acutely ill or injured." The sheets apparently will be (or have been) published in book form. They are written in both Spanish and English--an important factor in their favor since the Spanish-speaking population in California is a substantial portion of the population (and possibly an even larger proportion of the ED population as reports indicate Chicanos have less access to regular sources of care). The handouts vary in content depending on the problem, but, in general, they include information of the cause of the problem, home treatment, why it is important to take all of the medication, side effects or possible problems, and requirements for follow-up care.

Patient education and the community

ED personnel are becoming aware of the role of the hospital ED in providing not only life-saving care but also acting as a resource for programs in prevention and health promotion. In an article on the ED as a community service, the hospital ED's function is described as "that of a communication link between the community as a whole and qualified medical supervision" (The Hospital. . ., 1975). However, the literature on the hospital ED and its relations with the community is mainly in the form of pamphlets, brochures, and leaflets distributed by specific hospitals or local newspaper articles. Few articles appear in hospital literature on the subject except in specific areas such as hypertension screening programs and emergency medical services (EMS) access. The lack of literature on the subject may not mean that community programs do not exist. In fact, two reviewers believe that so many hospital EDs participate in or initiate such community activities as health fairs, CPR training, first aid courses, hypertension screening, and poison control programs that, unless there is some unique component of a program, they are not perceived to be newsworthy or fit subjects for articles in the hospital literature (Faas, 1980 and McMahon, 1980). The literature reviewed here represents only a small sampling of the numerous community projects that have been initiated or sponsored by EDs across the country.

It is interesting to note that Schwartz (1978), in his textbook on emergency medicine, devotes a whole chapter to "Prevention, consumer education, and community involvement." The author discusses the importance of teaching the community how to use the EMS and the ED. He also suggests that EDs sponsor projects in community first aid.

Several articles describe hypertension screening programs at individual hospitals. One project has been going since 1974 and now includes a program

in couples screening. The brochure describing the program gives some of the reasons why blood pressure screening has not been done in the past and why individuals are rarely prompted to seek care for the condition. The ED at the hospital developed a four-part screening program that includes ED blood pressure measurement, ED record review, follow-up blood pressure screening, and follow-up after rescreening. The brochure describes the positive impact the program has had on the community and offers suggestions for how other hospital EDs can organize such a program (Emergency Room . . ., 1980).

A study of the appropriateness of the hospital ED as a site for hypertension screening was done at Johns Hopkins Hospital, Baltimore. The results were that "in an urban community such as East Baltimore, the ED has the potential for screening a large segment of the population to detect many previously undetected, untreated, or improperly managed hypertensives." It is pointed out in the article that approximately one-fourth of the adults living in the East Baltimore area use the emergency department at the hospital at least once a year. If blood pressures on all patients are measured in the ED, the screening program can be an invaluable resource for detecting victims of a major national health problem (Kaszuba and others, 1978). Another article describes studies done at John Hopkins Hospital that attempt to target specific population groups for education in and detection of hypertension (Morisky and others, 1980).

Another study of hypertensive screening done at three university-affiliated hospitals discusses the advantages of doing such screening in the hospital ED and enumerates the problems involved in hypertension recognition. Suggestions are given for ED screening programs including establishing a routine to review charts and recall patients for follow-up and use of nurse practitioners to educate patients about hypertension (Glass and others, 1978).

An innovative program that reaches out into the community was established by the ED at North Central Bronx Hospital, NY. A health education program called the "Shadow Program" was developed for high school and college students who live in the community. Students were taught gonorrhea screening, cardiopulmonary resuscitation, and the measurement of vital signs including blood pressure, respiratory rate, and pulse. The students recorded data for their peers and eventually used their skills to get their peers with abnormal data back into the health care system. Students from this program, many of whom were from poverty-level homes, have gone on to college and pursued careers in medical or medically related fields (Goldfrank, 1978). Another role that the students in the program played was that of "shadows" to health care professionals as they made their rounds. The "shadows" acted as interpreters, patient advocates, and as aides to medical personnel. In this role, they often provided a means of bridging the gap between the affluent white physicians and the indigent black or Hispanic patients.

Other articles describe the hospital ED's relations with ethnic communities. Bello (1980), in her article, attempts to educate ED staff in cultural and ethnic differences in the Latino community. Tips are given on how to communicate through an interpreter. Various areas that might be sensitive ones for Latino patients are discussed, including attitudes toward modesty, family and religion, wife abuse, and grief responses. Suggestions for solving problems that EDs might have in treating Latino patients include contacting Latino community groups that might be able to offer translation services and

finding community resources that are available to Latino patients for follow-up care. Bello says that "The nurses should realize that, although they may be employees of a hospital, the hospital is part of a larger community and, as such, they have access to numerous existing community resources." Another shorter article describes the response of one ED to an influx of Spanish-speaking workers in the community. An ED nurse translated all of the patient instruction sheets into Spanish. The forms follow the same format in Spanish and in English so that English-speaking nurses can check the correct instructions in Spanish even if they don't know the language. The article reports that results were favorable in the community and that ED nurses felt that Spanish-speaking patients were better able to understand follow-up instructions (Miller, 1980).

Another article deals with the necessity of teaching community residents how to use EMS systems so that true emergency cases can be recognized in good time. Mogielnicki and others (1975) studied patient and bystander responses to medical emergencies and found that the general public's ability to respond appropriately to emergency situations was poor. Confusion and delay were two of the most serious flaws. An important finding that relates to patient education is that once patients learn to use the local emergency rescue service, they are more likely to use it again when they need it. This highlights the "teachability" of patients and suggests that high-risk patients who have not used the rescue service previously should be educated in its use. Mass education of the public in the use of EMS systems is suggested in the article as is universal use of a single, direct emergency service phone number.

One hospital ED in Washington has initiated several community outreach programs, two of which link the ED with the industrial community. An article in the hospital's Community Report describes a program that assists employees and their employers with difficulties related to accidents or injuries that occur in the work-place. The hospital ED helps with the process of filling out the numerous forms that are required for accident reports. An industrial service representative from the hospital's industrial services department is assigned to an injured patient and assists with problems related to workers' compensation benefits. This person also acts as a liaison with various hospital departments involved in follow-up care (Hospital provides. . ., 1980).

The second program that the hospital has offered relating to the industrial community in the area is the SOS. . .Save a Life at Sea Conference held in February 1981. The conference was organized to help fishermen to reduce the frequency and severity of ailments and injuries on the job. Participants learned how to assess medical conditions and provide appropriate treatment to ailing fellow workers. The planning committee for the conference was made up of a good cross section of the interested community. Two vessel owner associations participated as did the U.S. Public Health Service Hospital; an insurance company; the Fishing Vessel Safety Center at the University of Washington; Seattle Central Community College, Trident Ship Branch; The Washington Trollers Association; and the U.S. Coast Guard (Ballard Community Hospital, SOS. . ., 1980).

Two other community programs sponsored by the same hospital ED were Health Watch and Health Festival. Health Watch involved community members in

six-week health maintenance classes in which participants created their own written health record. Participants are trained to measure their own blood pressure, temperature, pulse, respirations, and lung capacity, and are taught how to use these tools to assess their general health (Ballard Community Hospital, Don't Miss. . ., no date). The health festival was a large public event that offered activities such as diabetes and hearing testing, vital lung capacity measurements, blood presures checks, and glaucoma screening (Health Festival, 1980).

Many emergency departments distribute brochures to the community that explain the services offered and instruct patients on how to use the ED. In most of the brochures, triage is explained and costs are dealt with. Some explain EMS systems and how they can be used. One brochure explains consent to medical care for children and includes a consent form that parents can sign and keep on hand in case they cannot be reached in case of an emergency (Ballard Community Hospital, Emergency Services, 1981; The Jordan Hospital. . ., no date).

An ED in Indiana responded to complaints about their increase in charges for care by providing a written explanation of costs to patients on the back of their ED bills. Costs are explained in pictures as well as in words. For example, when explaining physician charges, pictures show how the physician had to complete four years of college (a diploma), four years of medical school (a man studying), and two years of residency (a physician teaching a class of residents) in order to properly diagnose medical conditions. Hospital costs are explained in the same way (Hospital-patient. . ., 1979).

An important document that relates to the emergency department nurse's role in the community is EDNA's Tenth Anniversary Public Education Series (1980). The association chose the theme of public education to celebrate their tenth year of existence and developed a series of packets, one for each month of the year, on a specific area in which public education could be done by ED nurses. Each packet includes a suggested activities list, a suggested teaching outline, a bibliography, and examples of community activities that have been undertaken by hospital EDs to further community health education.

The January packet dealt with pediatrics and includes suggested activities such as offering to speak at local clubs on children's safety, teaching children CPR skills, and sponsoring accident prevention classes for children. A program that already has been developed in one ED is described in the pediatrics packet. The "Emergency Department Visits" program at Children's Hospital, Columbus, OH, was initiated by the head nurse in the ED. Children between the ages of four and ten are given tours of the emergency department. Various procedures such as cast application and removal, and x-ray procedures are demonstrated. ED nurses discuss with the children ingestion of medicines, fire prevention, running with sharp objects, and other topics related to safety.

The February packet on Heart Health suggested that EDs sponsor CPR marathons or offer low sodium, low cholesterol cooking lessons. Another activity, described in the March accident prevention packet, involves infant safety. A local Michigan service club set up an infant seat rental program in which parents can rent an infant car seat and save the cost of buying one that will be used only for a short time. In this way, parents can learn about the

importance of infant restraint systems and can rent high-quality seats to protect their babies. Also, more parents can use the same seats at lower cost.

The May packet dealt with sexual abuse and includes a detailed outline on how to set up a community victims' crisis center or telephone line. The November mental health packet included a description of a community approach to a transient suicide epidemic. One ED noticed an above-average incidence of adolescent suicide attempts in the community and initiated an educational campaign that was meant to help prevent further suicide attempts. A committee involving representatives from various hospital departments publicized the alarming rise in suicide attempts, and the local junior and senior high schools were approached. A panel and videotape presentation was offered to high school students. The incidence of suicide attempts in this age group dropped markedly after the campaign was launched. Other monthly packet topics included patient identification systems, EMS access, elderly abuse, disaster, handicapped, ED use, and alcoholism.

Conclusion

Although it would not be obvious in a less thorough review of the literature, staff in hospital EDs are using a variety of strategies to meet the educational needs of patients and their families in a setting not always conducive to program development in this area. Because of the extent of conflicting utilization, overcrowding, and followup problems, much innovative thought appears to have gone into the design of new clinic structures and protocols to address these issues. The need for rape and child abuse programming also appears to have resulted in extensive program development around these problems. No articles, however, describe emergency departments which have taken a comprehensive look at the patient education needs of the department. Rather, each article in the review looks at patient education from the perspective of a specific patient need, such as the need to return for suture removal, or the need for more information around prevention of asthma attacks. The Miller (1978) article provides a framework for the analysis of patient education problems and the development of programs. Nishiura and Runk (1980) and Lane and Mazzola (1976) also suggest the possibility of ED staff utilizing the expertise of hospitalwide health education resources to plan and implement appropriate patient and community education programs. Although based on this review one could not clearly recommend management systems most appropriate to the development of more comprehensive patient education programming in this setting, the variety of patient education services that have been successfully developed underscores the need for emergency department managers to address planning for these services in greater depth.

Part II

Case Studies

Introduction

At the time the case study section of this document was being developed, project staff encountered difficulty in identifying hospital emergency departments willing and able to participate as case study examples. This problem appeared to be related to two major areas of concern to ED staff: 1)many felt that their departments had been in a state of management reorganization during the past three to five years; and 2) many vocalized that they were not implementing enough patient education activities to warrrant a case study. This finding appears consistent with the documentation in the literature review that environmental pressures on EDs over the past decade have been extensive, and that the organizations' responses--new specialists, new clinic structures, and new programs, have demanded a large chunk of staff energies and resources. The three case studies included in this document reflect both areas of concern to a certain extent. All three reported some degree of major reorganization in the recent past and two were awaiting imminent moves into new ambulatory care facilities. All three, however, felt that they were meeting major patient education needs even though the ups and downs of patient flow, the conflict between emergent and non-emergent care, and some physician/nurse disagreement over teaching needs and roles have continued to cause problems.

All three emergency departments are busy (more than 50,000 visits per year) and are providing care to urban populations. Two report referrals from rural areas. All three emphasize that the one-to-one nature of the patient education activities are the most important; all three place great emphasis on the development of discharge instruction forms and patient handouts to supplement the individual teaching. Two of the three discuss development of followup mechanisms as being important both to the effectiveness of the teaching and to the evaluation of that effectiveness. One of these, the Children's Hospital case study, discusses how staff are implementing followup phone calls to a small sample of patients in order to assess continuing education needs and appropriateness of ED teaching interventions. The third ED feels that the development of mechanisms to ensure that each patient has a teaching discharge interview with a nurse is the most important future goal to ensure that patient education needs are really being met.

Each of the three examples has chosen a different emphasis for their community health activities. William Beaumont is the most heavily involved of the three in the local emergency medical services system and sees this organizational structure as an effective mechanism for community education. Staff will also be working with the public health nurses at the county health department, who provide nursing oversight to the local school system to develop an accident prevention program. Children's Hospital, not surprisingly, has put a great deal of emphasis on working with the local school system to develop tours and educational programs about the emergency department for school children.

Finally the Yale-New Haven ED has developed a comprehensive Victimology program which incorporates a variety of community education components.

Only one of the three examples discusses a relationship with hospitalwide patient education programs; the Children's Hospital ED works closely with the Homegoing Education and Literature Program to develop appropriate handouts for the emergency area. All threee, however, describe committees within the ED which are addressing patient education concerns.

Emergency Department, William Beaumont Hospital, Royal Oak, MI

The hospital. William Beaumont Hospital is a 950-bed institution serving the northwestern Detroit urban and suburban area. Although not a university hospital, Beaumont is affiliated with the medical schools of Wayne State University, the University of Michigan, and Michigan State University. The patient population is primarily white collar with a mixture of socioeconomic levels (lower middle to upper) and a variety of ethnic backgrounds, including a significant Arab minority. The Emergency Department is part of the Department of Emergency and Ambulatory Medicine, which also has a variety of specialty resident teaching clinics under its jurisdiction. The surgicenter and outpatient support services (e.g., x-ray, laboratory studies, physical therapy, etc.) answer to other departments.

Emergency department. The Emergency Department is a 24 hour, seven-days-a-week department, and is classified as a category I emergency service. An average of 64,000 patients are seen each year. At peak hours the minimum professional staff includes three staff physicians, 6-8 registered nurses, and 5-6 emergency technicians.

When a new patient enters the ED, he or she is triaged by a professional nurse to a critical care, acute, or non-acute area within the department. While there is no separate area for pediatric emergencies, there is a pediatric resident on call. This resident and members of the social work department are called in as needed, (e.g., in cases of suspected child abuse). A private room is provided for rape victims, each of whom is assigned a staff member to stay with her during the entire process of ED examination and the collection of evidence. The victim is then referred to a local Women's Crisis Center for rape counseling. Patients seeking alcohol detoxification services are held in the ED for 4 to 8 hours and then offered assistance in locating and transferring to a treatment facility.

Local emergency medical services (EMS) system. Oakland County, which is one of the largest counties in Michigan, has nine participating hospitals in the EMS system, including Beaumont. The project medical director for the system is on the staff of the Beaumont ED, which also houses the EMS communication coordinating center. The system is run by an overall council composed of a physician and an administrator from each hospital. Other staff and community members participate on council subcommittees.

The director of the Department of Emergency and Ambulatory Medicine feels strongly that major responsibility for community health education related to emergency medicine should be assumed by such a system or by a consortium. He notes that the nature of emergency health care makes it difficult for staff to implement in-depth community health education programs. The Oakland EMS system does run a "CPR-A-Thon" once a year at the Pontiac Silverdome for four to five thousand people and provides community wide information on disaster planning and how to access EMS.

Patient education activities. Nannette Binns, assistant director of the department and nursing supervisor, sees certain givens shaping the types of patient education activities that are implemented in the ED. First, she strongly believes that "most people coming to the emergency department perceive that they have something urgent. It may be," she adds, "that a person has had an earache for four days, but only just now feels that there is something to really be concerned about." One major goal of a professional's intervention with a patient is therefore to identify and reduce anxiety. She also notes, however, that all patients are in a hurry to leave the ED and go home.

A department committee composed of the director, two assistant directors, nurse managers, and physician staff is responsible for setting guidelines for patient education and for approving such materials as the new discharge instructions. In general, a nurse reviews followup care requirements with each patient and/or a significant other before discharge. The patient is asked to repeat instructions and/or demonstrate tasks required for followup care. During the past year, new medical and surgical discharge instruction forms have been developed which are given to the patient after the information has been discussed verbally. The surgical form, for example, has instructions for twelve different conditions--fracture of the finger or toe, sprains and bruises, etc.--in a two-sided, three-part format. For a patient who has received stitches for a small cut, the box "instructions for patients with lacerations" is checked, a date to return for removal of stitches is added, and the patient is asked to sign the form. One copy is given to the patient, one is kept in the emergency department in case the patient calls back with a question, and one goes to the chart.

The ED staff participate in community health education efforts through the hospital's speakers' bureau. Programs presented include talks to children about the ED, "Death and Dying" discussions, and talks to non-practicing community nurses about their role in delivering advice, first aid, etc., in the neighborhoods.

Problems and solutions. Ms. Binns feels that, for the most part, patient education needs in the ED are being met. However, while the ED has enough staff, the peaks and valleys of emergency department workload preclude comprehensive teaching at times. This is particularly true in regard to pediatric problems which may necessitate extensive well baby care instruction. The discharge sheets have made discharge teaching easier. Other strategies for dealing with limited time available for teaching include the formation of small informal groups of patients who share the same problem. Emergency technicians have also been trained to present discharge instructions for certain types of problems (e.g., sprains and bruises).

Another problem mentioned was poor communication because of cultural or language barriers. For example, in working with the Arabic population, not only are there lanaguage problems, but there are customs which have caused difficulty for ED staff. Culturally, Arabs tend to travel in large groups, all of whom want to be with the patient. Also, should there be a death in the ED, the person's family will, according to their custom, begin wailing very loudly for a long period of time wherever they are located. In order for staff to be better able to deal with problems such as these, inservices

have been designed to discuss specific cultural issues. Translators are also available through the hospital for this and other language groups. Deaf mutes have a special telephone hookup so they can dial into the switchboard directly.

Future programming. The assistant director reports that her major goal during the past three years has been to build the emergency department into a well-functioning, credible unit. She now forsees having additional time to work toward increasing the department's role in community health education. (Possibilities include offering babysitting classes for teenagers, and calling a sample of patients the day after their ED visit to see how they are, and whether they have any questions.) Other specific near future plans include lobbying for a patient advocate position, refining the system for emergency room transfer to nursing homes, and improving coordination with local industry in regard to the provision of emergency services to employees. In addition, Ms. Binns will be working with the public health nurses at the Oakland County Health Department, who provide nursing oversight to the Royal Oak school system, to develop protocols for emergency care in the schools and aid in the development of an accident prevention program and a policy/procedure book for public health nurses related to school health issues and concerns.

Emergency Department, Children's Hospital, Columbus, OH

The hospital. Children's Hospital is a 307-bed pediatric hospital located in downtown Columbus. The hospital, which serves as a referral center for the southern Appalachian region, provides 60 neonatal intensive care beds, 12 ICU, 44 infectious disease, 3 renal dialysis, 14 burn unit, 19 neurosurgery, 18 hematalogy, and 137 general medical/surgical beds. The only services not offered are psychiatry, ob-gyne, and radiation. Affiliated with the Ohio State University School of Medicine, the Children's Hospital has 35 specialty clinics, all teaching clinics with the exception of allergy. In cooperation with the city of Columbus, the hospital runs three satellite clinics as part of the children and youth project. The hospital is also a research center with research activities centered in the affiliated Children's Hospital Research Foundation.

Because Children's is a referral center, the patient population spans all socioeconomic and ethnic groups; there has been a recent increase in Southeast Asian clients, however. The patient age spread is newborn to 21 years although some older patients are being followed for chronic problems.

The emergency department. Designated as a trauma center, the emergency department saw close to 50,000 patients in 1980, down slightly from 1979. There appears to be growing competition among health institutions in Columbus, and with the development of independent emergency centers, among those providing emergency services as well. The average 134 patients per day coming into the ED are triaged by a nurse into emergent and nonemergent care areas. Recent changes in the triage system--including discontinuation of routine blood pressure screening on children three years or younger, widening the range of ED referrals to the pediatric clinic and elimination of categorization of patients by age--are helping to decrease triage time. The ED is also piloting the role of paramedics to supplement professional staffing. Daytime staffing includes 8 RNs, 1 paramedic, 1 nurse's aide, 2 staff physicians, and one resident and intern; the night RN staff drops to four and the physician staff to one resident. Special services include a child advocacy team regularly available at least by page and a chaplaincy program. The head of pastoral care at the hospital runs a clinical counseling program which includes an ER rotation; the clergy participating are not students but practicing pastors from the area. There is also an active volunteer program which runs a babysitting service for siblings of ED patients from 4 to 9 p.m. daily. Staff also use volunteers to accompany patients to x-ray/laboratory and to interact with waiting patients and families.

There are no followup clinics in the ED area although laceration and burn patients are asked to return to the ED for dressing changes and suture removal. Patients who have throat or blood cultures taken are also called with results.

The head nurse in the ED is interested, in the long run, in having her staff identify certain populations of patients who need followup contact, although she is not sure how to best identify the most needy, or how to schedule staff to provide more indepth followup services. Each RN in the ED now makes a

limited number of followup calls to selected patients. Each of the calls is reviewed with the head nurse, who reports that this is a very useful technique to sensitize staff to patient education needs. Many of the problems identified at followup arise because of inappropriate teaching techniques. For example, a staff nurse called back a parent who had brought in a child with croup; she felt that the family's anxiety could be traced to her ED emphasis on discussing potential problems/dangers rather than to concrete things they could do to prevent complications.

Patient education activities. Patient education services are delivered on an individual basis to patients as they are seen in the emergency department. Using the Helping Hand materials described below, staff provide information on disease or condition, home care, and special skills like temperature taking and well child care. A copy of the Ambulatory Admission form which lists diagnosis, referral, home care instructions, and Helping Hand sheets provided is given to the patient at discharge. Assessment of ED teaching needs and decisions about future activities may be made through four different mechanisms:

- The ED steering committee (medical director, head nurse, unit manager), which meets weekly;
- The ED Quality Assurance Committee, composed of staff members with the head nurse as consultant;
- Various general nursing and hospital committees, which approve specific policies and procedures;
- The Helping Hand program.

Approximately 100 patient/parent satisfaction questionnaires are turned in each month for review by the ED steering committee; this is another mechanism through which teaching needs may be identified.

Helping Hand Program. The Homegoing Education and Literature Program (H.E.L.P.) was begun in 1975 to assist health professionals at Children's Hospital with their patient teaching efforts. Currently the program offers more than 175 clearly written and illustrated teaching aids providing homegoing instructions and other health information for patients and their families. These teachings aids--called "Helping Hands"--are generally one to two pages in length. Each discusses in simple language (average fog index of 6th grade) a single topic or procedure. Helping Hand subject categories include: procedures (e.g., crutch walking, ear irrigations, fever reduction, etc.); diagnostic tests (e.g., bone marrow tests, cardiac catheterization, gall bladder test, glucose tolerance test, etc.); child care and health information (e.g., formula preparation, immunizations, cleaning teeth and gums, etc.); and medications (e.g., giving eye drops, how to give injections, prednisone, etc.).

Any health professional at Children's Hospital may initiate a request for development of a Helping Hand. Coordinated through the H.E.L.P. program, each new teaching aid is written and critiqued by many health professionals with expertise in the topic area. Patients and families also review the draft

of the teaching aid and recommend changes. After review and critique by the nursing executive committee, Helping Hands are approved by physicians who specialize in the topic area.

Each unit or clinic in the hospital has a portable Helping Hand file containing teaching aids pertinent to that area. They are also now available for purchase by interested physician offices. Paramedics trained in the ED tend to use these sheets long after they have left Children's.

The Helping Hand program is in the process of developing more than fifty new or revised sheets, several designed specifically to meet ED teaching needs. These include a "How to Utilize the Emergency Service" brochure, diet sheets for oriental patients with vomiting/diarrhea, and revisions of the aspirin, croup, and fever reduction teaching aids. An ED staff member is also working with a nursing student to prepare a well child booklet--"You and Your Child"--which may be published by the H.E.L.P. program.

The ED head nurse strongly emphasizes that these teaching aids are not just "handed out" by her staff. The pertinent information is reviewed with each patient, and specific skills are demonstrated. While the effectiveness of this teaching method has not been formally evaluated, she feels that the informal evidence is supportive--when patients call back with questions, for example, they usually ask only about details and have their Helping Hand sheets with them.

School Tours. The emergency department has been sponsoring very popular "school tours" for the past several years as their major community health education program. In general, the tour is about two hours in length, is open to school groups K-12, and, until recently, was limited to groups of no more than thirty. However, because the schools are pressed for funds (making it difficult to support large numbers of field trips), the ED staff have been experimenting with larger groups of fifty or sixty students.

The tour emphasizes basic information on when and how to use the ED, what major ED procedures look like, and how to prevent accidents. The tour meets in a central place, and the children are given a variety of handouts/puzzles related to ED topics. For example, they may receive the "Poison House", which is a picture of a house full of poisons which the children must identify. A "Burn House" is similarly used to discuss fire prevention. The RN and paramedic organizing each particular tour take special equipment to the central meeting area such as a monitor or blood pressure cuff. They also use a member of the ED staff to demonstrate the procedure for putting on and taking off a cast. A slide program will be used to provide an overview of the services provided by the ED. The tour then breaks up into small groups to walk through the x-ray and ED areas.

The ED head nurse assigns different staff to each tour so that the responsibility is rotated. At present, only one tour per week is scheduled, although the demand is often greater. During 1981, 657 children participated in this program; and 550 students have already been scheduled to tour the ED between January and May of 1982.

Problems and solutions. During the past two years, the emergency department has witnessed high nursing staff turnover and a variety of leadership problems which seem to have been resolved in recent months. The ED head nurse believes that, for the most part, the implementation of patient education activities is comprehensive.

She feels, however, that there are still problems in tailoring educational encounters to ensure "patient understanding and compliance." Her major strategy to resolve these problems is to encourage staff followup contacts with selected patients as described in an earlier section of this case study. She feels, however, that the Medicaid cutbacks and the generally poor economic situation are going to make it more difficult for people to comply--particularly with diet changes. Other needs related specifically to patient education activities include the need for nursing inservices to assist staff in dealing with new ethnic groups (in this case Southeast Asian patients), and a need for a greater flexibility in the way school tours are implemented so as to accommodate larger groups.

Future. A new ambulatory care center--the Children's Hospital Professional Building--is now being built. This center will house some of the ambulatory programs as well as private physician offices. How this will affect the delivery of emergency care is being studied presently. The major future goal related to patient education is the further development of the individual patient followup mechanism. The ED also plans to work with the Child Life Department on a variety of activities including use of the closed circuit television system to broadcast health education programs in the waiting area.

Yale-New Haven Hospital, Emergency Department, New Haven, CT

The hospital. Yale-New Haven Hospital is a 927-bed teaching institution affiliated with Yale University Medical School. It is the second-largest hospital in Connecticut, and has the busiest emergency department in the state. The wide range of outpatient services includes specialty teaching clinics for all major clinical areas, and for less common areas such as Gerontology and Occupational Medicine. The primary care center encompasses pediatric clinics, adult medicine clinics, a hypertensive screening clinic, and a special clinic for Southeast Asian refugees. In 1979, construction began on a new seven story inpatient unit to replace outdated facilities, with projected occupancy set for Spring 1982. At that time, the more than 60 outpatient clinics now scattered throughout the medical center will be centralized in an adjacent unit, although plans for this reorganization are as yet incomplete.

The hospital serves the New Haven community (population 100,000) as well as a wide range of communities in the greater New Haven area. Because it is a major teaching institution, however, the medical center is also a referral center for the state and--in specialized cases--for the U.S. and foreign countries. For example, eighty percent of children treated for leukemia at the hospital come from outside the greater New Haven area. There are two other hospitals in New Haven--St. Raphael, a 482-bed institution, and a Veterans Administration Hospital.

Because of the high number of referrals, the patient population is very diverse. New Haven is a university town with a mix of industries such as ammunition and rubber. It is, moreover, a port on Long Island Sound with a moderate amount of shipping. Many residents commute to New York City or to other major Connecticut towns on the way. Economically, there is a mix of poor and affluent areas. Major ethnic minorities include blacks, hispanics, and a growing Southeast Asian refugee population.

The emergency department. The Yale-New Haven Emergency Department is a 24-hour designated trauma center with more than 85,000 visits reported between October 1980 and September 1981. Although this represents a drop of approximately 4,000 visits from the previous comparable time period, the ED clinical specialist reports that the acuity level of patients is increasing, as the emergency department handles a greater number of referral cases and admissions.

When a patient enters the emergency department he or she is seen by one of two RNs assigned to triage and sent to one of six treatment areas--Adult Medicine, Ob/Gyne, Surgery, Pediatrics, Psychiatry/Substance Abuse, or Urgent Visit. Although patients are not triaged into formal emergent/nonemergent categories, the area to which a patient is sent defines level of acuity to a certain extent. For example, patients sent to Adult Medicine are seriously ill (e.g., heart attack) or in need of a major diagnostic workup (e.g., abdominal pain), while those sent to Urgent Visit usually have minor problems.

Special services. In addition to providing a wide range of standard emergency services, several special activities deserve mention here:

Victimology Program. A nurse practitioner reporting to the director of ambulatory nursing coordinates this service program. Established "to provide adult victims of physical and sexual abuse with comprehensive care directed at meeting their medical and psychological needs," the program has, until recently, been focused primarily on rape victims. A network of on-call rape counselors has been selected and trained specifically for this program. In the event of a rape presenting to the ED, the triage nurse notifies the charge nurse, who contacts the counselor on call. The counselor is present during the physical examination and collection of evidence to provide counseling, education, and support as needed, and follows up on the patient after discharge. Counselors are reimbursed for their time.

Until recently, services for battered persons were more limited. The patient would be advised of available community resources such as the New Haven Shelter for Battered Women, and offered an opportunity to meet with a staff member of the Battered Person Program--the coordinator of the Victimology Program, the Emergency Services Social Worker or a nurse practitioner from the Primary Care Center. This program is currently being expanded to include a network of on-call counselors similar to that of the rape program.

Child abuse. Cases of suspected child abuse are identified by an ED nurse, pediatric resident, or by personnel in the pediatric clinic and are referred to the pediatric social worker for assessment. Coded DART (Detection, Assessment, Referral, and Treatment), each case is reviewed once a week by the social worker and a team of pediatricians. The state Department of Children and Youth Services (DCYS) is involved when appropriate.

Alcohol services. In 1976 a law was passed in Connecticut that persons found under the influence of alcohol could not be jailed but must be treated in a detoxification center. The Yale-New Haven ED has a four-bed substance abuse room; ED staff are assisted four to five evenings a week by Alcoholics Anonymous volunteers who are available to sit with and talk with the alcohol patients.

Interpreter. Days and evenings in the ED and in the clinics, an interpreter is available for hispanic patients. These people asist in patient/staff translation and also appear to respond to a wide variety of questions/problems presented by the Spanish speaking population. There is also a list of interpreters for most other common languages who are available on an on-call basis.

Other services. The hospital's patient advocate is available by phone from the ED. Ministers from specific religious groups are on-call through the religious ministries department.

Staffing. Basic staffing of the Emergency Department includes attending and resident physicians, forty four registered nurses, two LPNs, one nurse practitioner for the Urgent Visit clinic, three physician assistants, and aides and technicians. A master's prepared clinical specialist in medical-surgical nursing has a case load of ED patients, provides inservice education for nursing staff, and is responsible for orientation of nursing and other ED staff. A full-time social worker is assigned to the Emergency Department. The coordinator of the Victimology Program provides special inservices, as well as patient care, to rape victims and battered persons in the ED. Two mental health workers reporting to the ED psychiatrist are responsible for the preliminary screening of psychiatric patients and also assist in the care and treatment of patients. The Yale-New Haven ED is the only emergency service in the State offering 24-hour psychiatric coverage. In addition to the Alcoholics Anonymous volunteers, there are approximately fifty hospital volunteers who have chosen to work in the ED; their responsibilities may include patient transport, holding children, talking with patients/family, and so forth.

Primary nursing or, as it is known at Yale-New Haven, the professional model of nursing, began to be implemented in selected hospital units in the spring of 1981. At the present time, it has only been implemented in the Adult Medicine area of the emergency department, however, because of such factors as number and type of patients, staffing levels, and so forth. The eighteen beds in Adult Medicine are divided into districts; each "primary nurse" is totally responsible for patients in beds in her district--for example, one nurse is responsible for the 3-bed Major Medicine area. The ED clinical specialist reports that primary nursing works well here on slow or moderate days but is very difficult to implement when the patient load is heavy.

Patient education activities. Patient education services are delivered on an individual basis as patients are seen in the emergency department. Patients in the Adult Medicine area see a nurse before discharge to go over followup and home care instructions if they are not admitted to an inpatient unit. An ED nursing assessment committee composed of the head nurse, assistant head nurse, clinical specialist, and three staff RNs has developed a new ED patient intake form which will, among other things, facilitate the documentation of patient teaching activities. However, patients will not be asked to sign this form, nor will they take home copies of it. Ms. Edwards, the ED clinical specialist, feels it is more important to emphasize adequate teaching and appropriate handouts. In fact, there is one ED handout which summarizes instructions for a variety of surgical problems. Both physicians and nurses feel that more such handouts should be made available. The ED nursing assessment committee is planning to develop a selection of handouts as is the hospitalwide pharmacy committee. All these handouts will be used in the ED.

Patient education is a part of many of the specialized services offered by the ED, notably the Victimology Program. The coordinator, staff, and "on call" counselors provide a wide range of information on diagnosis, assessment, followup, and community resources as well as support and counseling to rape victims. The coordinator of the Victimology Program has also organized a variety of community discussions/seminars on rape and domestic violence. The two mental health workers offer classes at the hospital for community members on alcoholism.

Problems. The clinical specialist feels that the inconsistency with which nurses are able to do discharge teaching is the major problem in the delivery of patient education services. This is due in part to the rapid turnover of patients, especially on busy days. Nurses cite lack of physician support for their teaching role as another problem. Successful implementation of primary nursing in the Adult Medicine area, development of new patient handouts by the nursing assessment committee, and continued discussion with physicians about the relationship of nurse teaching to compliance are seen as some strategies to alleviate this problem. Ms. Edwards, the clinical specialist, cites a recent abstract by Carol Goodykoontz in the Journal of Emergency Nursing(7:2, 69) which describes the large increase in patient compliance with followup visits among patients who received a handout with a nurse review as compared to those who received routine emergency department care.

Future. A major future goal is to ensure that each patient sees a nurse for teaching before discharge. Primary nursing may be expanded to other areas of the ED if the problems caused by rapid patient turnover and present staffing patterns can be resolved. The nursing assessment committee will be reviewing the types of patient handout sheets other EDs have developed before designing a series to meet specific needs at Yale-New Haven Hospital. The counselor-on-call component of the rape program will be used as a model for a similar service for battered persons. The move to the new hospital facility in the spring of 1982 will undoubtedly result in a need to rethink present ways of doing things in the Emergency Department--including patient education.

References

Authors referred to in the text are listed here in alphabetical order by author's last name.

Abarbanel, G. Rape: What your hospital can do. Hosp. Forum, 19:4-21, Aug. 1976.

---. Helping victims of rape: Santa Monica Medical Center. Soc. Work, 21:478-482, Nov. 1976.

Allgaier, A. Hospitals respond to rising rape rate. Hospitals, J.A.H.A., 53:65-69, Aug. 1, 1979.

Alongi, S., and others. Physician and patient acceptance of emergency nurse practitioners. J. Amer. College Emergency Phys., 8:26-28, Sept. 1979.

American College of Emergency Physicians. Emergency medicine care content. J. Amer. College Emergency Phys., 8:34-40, Jan. 1979.

American College of Surgeons, Committee on Trauma. Guidelines for the patient- physician relationship in the emergency department. Bulletin Amer. College/Surgeon, 62-15, Oct. 1977.

American Hospital Association. Accreditation of ambulatory care patient education. Unpublished draft. Chicago: AHA, 1980.

---. Patients' rights and informed consent: a defined need for patient education. Unpublished draft. Chicago: AHA. Nov. 1980.

Anwar, R. A., and others. The continuing emergency care clinic: improving patient compliance with follow-up care. J. Amer. College Emergency Phys., 6:251-253, June 1977.

Anzinger, R. K. Emergency department physician: man in the middle. Hosp , Med. Staff 5:10-13, Aug. 1976.

Ballard Community Hospital. Don't miss health watch. Class brochure. Seattle, WA, Oct./Nov. 1980.

---. Emergency services. Brochure. Seattle, WA, Jan. 10, 1981.

---. SOS. . . save a life at sea. Conference brochure. Seattle, WA, Feb. 20-21, 1980.

Baranowski, P. Volunteer ombudsmen in the emergency department: a role for the male volunteer. The Volunteer Leader, 17:23-27, Spring 1976.

Barber, J. M., and Budassi, S. A., eds. Mosby's Manual of Emergency Care. St. Louis: The C. V. Mosby Company, 1979.

Bassuk, E., and others. Organizing a rape crisis program in a general hospital. J. Amer. Med. Women's Assn., 30:486-490, Dec. 1975.

Baum, J. Emergency hospital care: issues of treatment and liability. Med. Malpractice Cost Containment J., 1:27-31, Apr. 1979.

Bello, T. A. The Latino patient in the emergency department. J. Emergency Nurs., 6:13-16, July/Aug. 1980.

Bone, R. C., and Hiller C. Modern treatment of bronchial asthma. J. Amer. College Emergency Phys., 7:269-275, July 1978.

Brodsky, L. and others. Extension of emergency medical care: continuing emergency care clinic. J. Amer. College Emergency Phys., 7:358-360, Oct. 1978.

Brown, J. Telephone Medicine. St. Louis: C.V. Mosby Co., 1980.

Burgess, A. W., and Holmstrom, L. L. The rape victim in the emergency ward. Amer. J. Nurs., 73:1740-1745, Oct. 1973.

---. Rape: Victims of Crisis. Bowie, MD: The Brady Company, 1974.

---. Crisis and counseling requests of rape victims. Nurs. Res., 23:196-202, May/June 1974.

---. Rape trauma syndrome. Amer. J. Psychiat., 31:981-986, Sept. 1974.

---. Sexual assault: signs and symptoms. J. Emergency Nurs., 1:10-15, Mar./Apr. 1975.

---. Accountability: a right of the rape victim. J. of Psychiatr. Nurs., 13:11-16, May/June 1975.

Cael, T. Child abuse: hospital team and public agencies help patients and parents. Hospitals, J.A.H.A., 52:135-138, Nov. 16, 1978.

Can emergency rooms be humane? J. Amer. Med. Assn., 233:399-405, Aug. 4, 1975.

Canan, J. Migraine headaches. J. Emergency Nurs., 6:9-13, Mar./Apr. 1980.

Champlain Valley Physicians Hospital Medical Center. Emergency room high blood pressure screening program. Paper presented at the National Conference on High Blood Pressure Control, Houston, TX, 1980.

Chapman, A., and Harvey, A. Making certain the patient understands: discharge planning nurse in the ED. J. Emergency Nurs., 2:33-36, Mar./Apr. 1976.

Clark, T. P. Counseling victims of rape. Amer. J. Nurs., 76:1964-1966, Dec. 1976.

Cohen, F. G., and others. Changes in hospital care for rape victims. J. Emergency Nurs., 2:19-23, Nov./Dec. 1976.

Daniels, J. S. Emergency department management of rape. Ohio State Med. J., 75:351-352, June 1979.

Dilts, S. L. The alcohol emergency room in a general hospital: a model for crisis intervention. Hosp. Community Psychiat., 29:795-796, Dec. 1978.

Drop-in center eases emergency. Health Care, 6:8, Oct. 1979.

Eggland, E. T. The anxious family in the emergency room. Nurs. Care, 8:28-32, Nov. 1975.

Emergency Department Nurses Association. Tenth Anniversary Public Education Series. Chicago: EDNA, 1980.

Erler, M. S. Iron poisoning. J. Emergency Nurs., 6:40-42, Mar./Apr. 1980.

Evans, H. I., and Sperekas, N. Community assistance for rape victims. J. of Community Psychol., 4:379-381, Oct. 1976.

Farber, H. M. Emergency department social work: a program description and analysis. Social Work in Health Care, 4:7-18, Fall 1978.

Fletcher, S. W., and others. Improving emergency room patient follow-up in a metropolitan teaching hospital. New Engl. J. Med., 291:385-388, Aug. 22, 1974.

Freeman, M. A. Drop-in child care: sandcastles and sensitivity. The Volunteer Leader, 20:23-25, Summer 1979.

Frick, M. A. Toxemia and the emergency department nurse. J. Emergency Nurs., 4:29-33, May-June 1978.

Geolot, D., and others. Emergency nurse practitioner: an answer to an emergency care crisis in rural hospitals. J. Amer. College Emergency Phys., 6:355-357, Aug. 1977.

George, J. E. The legal problem of the telephone. J. Emergency Nurs., 2:51, July/Aug. 1976.

Gephardt, D. Anaphylaxis from insect stings. J. Emergency Nurs., 4:19-23, May-June 1978.

Getz, W. L., and others. Paraprofessional crisis counseling in the emergency room. Health and Soc. Work, 2:57-73, May 1977.

Geyman, J. P. Trends and concerns in emergency room utilization. J. Family Pract., 11:23-24, Jan. 1980.

Gibson, G. Emergency medical services in the Chicago area. Center for Health Administration, Univ. of Chicago, 1970.

---. Walk-out patients in the hospital emergency department. J. Amer. College Emergency Phys., 7:47-53, Feb. 1978.

Gifford, M. J., and others. Emergency physicians' and patients' assessments: urgency of need for medical care. Ann. Emergency Med., 9:502-507, Oct. 1980.

Glass, R. I., and others. Screening for hypertension in the emergency department. J. Amer. Med. Assn., 240:1973-74. Oct. 27, 1978.

Glass, R., and Friedman, M. S. Trends in the demands for emergency room services. The Mt. Sinai Hospital. Mt. Sinai J. Med., 44:560-565, July/Aug. 1977.

Goldfrank, L., and others. The emergency services physician assistant: results of two years' experience. Ann. Emergency Med., 9:96-109, Feb. 1980.

---. Linking emergency room and ambulatory service. Urban Health, 7:12-26, July/Aug. 1978.

Green, M. G., and others. A profile of the elderly patient: emergency, outpatient, and inpatient utilization. Unpublished paper read at the American Public Health Association annual meeting, Detroit, MI, Oct. 22, 1980.

Gwinn, M. E., and others. On call is not enough: social workers in ED. Hospitals, J.A.H.A., 53:73-75, Dec. 1, 1979.

Halperin, R. Utilization of pediatric emergency services. Pediat. Clin. of North Amer., 26:747-756, Nov. 1979.

Health festival. Community Report, 3:8-9, Autumn 1980.

Hilditch, J. R. Changes in hospital emergency department use associated with increased family physician availability. J. Family Pract., 11:91-96, Jan. 1980.

Hilker, T. L. Nonemergency visits to a pediatric emergency department. J. Amer. College Emergency Phys., 7:3-7, Jan. 1978.

Holloway, N. M., ed. Emergency Department Nurses Association Core Cirriculum. 2nd ed. Chicago: EDNA, 1980.

Hospital clinic for asthmatics cuts emergency visits. Med. World News, 19:29, May 29, 1978.

Hospital emergency department visits decrease in 1981. Outreach, 3:1, May-June, 1982

The hospital emergency room: a comprehensive community service. Southern Hosp., 43:6-7, Feb. 1975.

Hospital-patient communication aided by innovative forms. Hospitals J.A.H.A., 53:14-15, Jan. 1, 1979.

Hospital provides service to Ballard's industrial community. Community Report, 3:12, Autumn 1980.

Ianzito, B. M. Overnight admission for psychiatric emergencies. Hosp. Community Psychiat., 29:728-730, Nov. 1978.

Johnson, G., and others. The emergency department physician and the university teaching hospital. Arch Surg., 113:678-683, June 1978.

Johnston, D. H. Crisis intervention training for emergency medical personnel. J. Emergency Nurs., 3:27-30, May-June 1977.

Joint Commission on Accreditation of Hospitals. Accreditation Manual for Hospitals, 1980 ed. Chicago: JCAH, 1980.

Jonas, S., and others. Monitoring utilization of a municipal hospital emergency department. Hosp. Topics, 54:43-47, Jan./Feb. 1976.

Jones, W. H. Emergency room sudden death: what can be done for the survivors? Death Educ., 2:231-245, Fall 1978.

The Jordan Hospital. Emergency Department. Brochure. Plymouth, MA, no date.

Kaszuba, A. L., and others. Evaluation of the emergency department as a site for hypertension screening. J. Amer. College Emergency Phys., 7:51-55, Feb. 1978.

Kaufman, H., and others. Follow-up of rape victims in a family practice setting. Southern Med. J., 69:1569-1571, Dec. 1976.

Kelman, H. R., and Lane, D. S. Use of the hospital emergency room in relation to use of private physicians. Amer. J. Public Health, 66:1189-1191, Dec. 1976.

Kramer, F. E., and others. Pediatric hot line: a model for after hours coverage. Urban Health, 8:45-48, Sept. 1979.

Krogseng, B. A. Assessment of coronary risk factors. J. Emergency Nurs., 5:19-24, Mar.-Apr. 1979.

Lane, D. S., and Evans, D. Study measures impact of emergency department ombudsman. Hospitals, J.A.H.A., 52:99-104, Feb. 1, 1978.

---, and Mazzola, G. The community hospital as a force for health planning. Amer. J. Public Health, 66:465-648, May 1976.

Lanros, N., ed. Assessment and Intervention in Emergency Nursing. Bowie, MD: The Brady Company, 1978.

Levy, J. C., and others. Development and field testing of protocols for the management of pediatric telephone calls: protocols for pediatric telephone calls. Pediatrics, 64:558-563, Nov. 1979.

Maiman, L. A., and others. Education for self-treatment by adult asthmatics. J. Amer. Med. Assn., 241:1919-1922, May 4, 1979.

Mancini M. Liability in the emergency room. Amer. J. Nurs., 78:1083-1084, July 1978.

Maxfield, R. G., and others. Utilization of supervised physician's assistants in emergency room coverage in a small rural community hospital. J. Trauma, 15:795-799, Sept. 1975.

McDonald, J. Emergency care: an emergency room that gives better care to more people. Mod. Health Care, 5:33-36, June 1976.

McMahon, M. Letter to Barbara Giloth, Center for Health Promotion, American Hospital Association, Chicago, Aug. 30, 1980.

---. Letter to Barbara Giloth, Center for Health Promotion, American Hospital Association, Chicago, Sept. 14, 1981

---. Medical-surgical emergency nursing. In: Luckman, J., Sorensen, K. C., eds. Medical-Surgical Nursing: A Psychophysiologic Approach. Philadelphia: B. W. Saunders Co.

McMicken, D. B. After the emergency. Emergency Med., 11:63-64, April 15, 1979. 11:129, May 15, 1979
11:119, June 15, 1979
11:139, July 15, 1979
11:125, Aug. 15, 1979
11:105, Sept. 15, 1979
11:87, Oct. 15, 1979

McMullen, M. J., and others. Short-term follow-up of emergency department patients in a medical center environment. J. Ambulatory Care Manage., 2:67-72, Nov. 1979.

McNamara, J. J., and others. Assessing the quality of care by house staff in a municipal hospital emergency department. J. Amer. College Emergency Phys., 5:257-261, Apr. 1976.

Miles, P. A. Sexually transmissible diseases. J. Emergency Nurs., 6:6-12, May/June 1980.

Miller, M., ed. Incidentally. J. Emergency Nurs., 6:37, July/Aug. 1980.

---. Patient teaching in the emergency department. J. Emergency Nurs., 4:21, Jan./Feb. 1978.

Mitchell, J. H., and others. Telephone follow-up for ER audits. Quality Rev. Bull., 4:6-8, July 1978.

Mogielnicki, R. P., and others. Patient and bystander response to medical emergencies. Med. Care, 13:753-762, Sept. 1975.

Morisky, D. E., and others. Using educational diagnosis results to target specific hypertension control strategies for population subgroups. Paper read at the American Public Health Association annual meeting, Detroit, MI, Oct. 19-23, 1980.

National Center for the Control and Prevention of Rape. Medical and psychological aspects of sexual assault, and Resource materials on sexual assault. National Institute of Mental Health, 5600 Fishers Lane, Rockwell, MD, 1977.

New trend to nonhospital ERs crosses country. Med. World News, 19:16-17, Aug. 7, 1978.

Nishiura, E., and Rank, M. A. Usefulness of videotapes in the emergency department's parent waiting room. Roundtable discussion in maternal and child health at American Public Health Association annual meeting, Detroit, MI, Oct. 20, 1980.

O'Donovan, T. K. The management and leadership role of the emergency physician: some intra-hospital relationships. J. Amer. College Emergency Phys., 6:458-461, Oct. 1977.

Parents about to abuse. Emergency Med., 9:213+, Sept. 1977.

Parker, B., and Schumacher, D. N. Battered wife syndrome and violence in the nuclear family of origin: a controlled pilot study. Amer. J. Public Health, 67:760-1, Aug. 1977.

Parker, S. Life change in ED patients with non acute conditions. J. Emergency Nurs., 8:34-37, Jan./Feb. 1982.

Patient reps in the ER: an asset to your QA program. Hosp. Peer Rev., 5:555, May 1980.

Pearce, C. Conversation with Alice Allgaier at American Hospital Association, Chicago, Feb. 18, 1981.

Pearson, D. A., and others. An emergency medical care facility: program characteristics and patient attributes. J. Amer. College Emergency Phys., 5:174-179, Mar. 1976.

Pisarcik, G. Why patients use the emergency department. J. Emergency Nurs., 6:16-21, Mar./Apr. 1980.

Prybil, L. D., and others. Utilization of Virginia's hospital emergency departments. Virginia Med., 104:181-183, Mar. 1977.

Quitkin, E., and others. Emergency and long term response to battered women. Unpublished paper. New York: Long Island Jewish-Hillside Medical Center, 1980.

Roglieri, J. L., and Goldsmith, S. B. Professional staff acceptance of medical nurse practitioners in ambulatory care. J. Ambulatory Care Manage., 3:15-30, Feb. 1980.

Rosekrans, J. and others. Pediatric Telephone Protocols. Darien, CT: Patient Care Publications, 1979.

Sandvik, J. R. Help! (puff! puff!) I have an emergency. J. Emergency Nurs., 3:17-20, July/Aug. 1977.

Schroeder, S. A. The increasing use of emergency services: why has it occurred? is it a problem? Editorial. Western J. Med., 130:67-69, Jan. 1979.

Schwartz, G. R., and others, eds. Principles and Practice of Emergency Medicine, 2 vol. Philadelphia: W. B. Saunders Co., 1978.

Shah, C. P., and others. An expanded emergency service: role of telephone services in the emergency department. Ann. Emergency Med., 9:617-623, Dec. 1980.

---. Pediatric emergency services of the future. Can. Med. Assoc. J., 114:307, Feb. 21, 1976.

Sobel, D. Telephone medical advice. Medical Self Care, :45-47, Winter 1980.

Sherber, J. Crisis intervention counselor. J. Emerg. Med. Serv., 6:17+, May/June 1977.

Staff shows health educational films in ED waiting area. J. Emergency Nurs., 5:51, July/Aug. 1979.

Stalker, T. A. What's behind the explosive growth in hospital-based primary care? Hosp. Phys., Part I, 15:26-28, Feb. 1979; Part II, 15:22-24, Mar. 1979.

Steele, M. M. Emergency care: a profit-making, patient-pleasing emergency room: Warwick, RI. Mod. Health Care, 5:25-29, June 1976.

Stoner, J. Letter to Barbara Giloth, Center for Health Promotion, American Hospital Association, Chicago, Aug. 29, 1980.

Strasser, P. H., and others. Controlled clinical trial of pediatric telephone protocols. Pediatrics, 64:553-557, Nov. 1979.

Webb, S. B., and others. How full-time ED physicians affect admissions. Hosp. Med. Staff, 6:25-28, July 1977.

Weigmann, T., and Galvin, T. P. Patterns of emergency health care. Virginia Med., 104:563-566, Aug. 1977.

Weitzman, M., and others. An after-hours pediatric walk-in clinic for an entire urban community: utilization and effectiveness of follow-up care. Pediatrics, 65:964-970, May 1980.

West, N., and others. A variety of roles for an emergency department patient coordinator. Hosp. Topics, 55:38-39, July/Aug. 1977.

White, M. S., and Gibson, G. Evaluation of an emergency department patient advocacy program. J. Amer. College Emergency Phys., 7:145-48, Apr. 1978.

Wilson, L. B., and others. The growing elderly population: a challenge to the emergency department. Unpublished paper read at the American Public Health Association annual meeting, Detroit, MI, Oct. 22, 1980.

Wolcott, B. W. What is an emergency? depends on whom you ask. J. Amer. College Emergency Phys., 8:241-243, June 1979.

Young, M. L. Entry point into the health care system: a patient survey in a hospital emergency department and planning for the nonurgent patient. Paper read at the American Public Health Association annual meeting, Nov. 7, 1979.

Yuki, T. Caring for the urban American Indian patient. J. Emergency Nurs., 110-113, May/June 1981.

Zimmer, B. Animal and human bites. J. Emergency Nurs., 5:8-10, May/June 1979.

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